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THE ELEVENTH CENSUS OF THE UNITED
STATES.

ON the first day of the present session of Congress, the Hon. S. S. Cox, of New York, introduced into the House of Representatives a resolution providing for the appointment of a committee on the Eleventh Census. The offering of this resolution calls attention to the near approach of another decennial enumeration, under the Constitution. It is most fortunate that the active, progressive, and enlightened statesman who framed the law of March 3, 1879, is still in Congress to apply the experience of the last census to the legislation for the next. Mr. Cox's promptitude shows that his interest in the subject has suffered no abatement.

In undertaking a discussion as to what should be done towards the performance of this most important constitutional function, it will perhaps be well to recognize the fact that the preparations for the Eleventh Census are likely to be in some degree embarrassed by the financial

and other misfortunes which befell its immediate predecessor. The successive deficiency-appropriations for that work, the delays in the publication of some of the later volumes, together with the newspaper attacks upon the Census, which became epidemical in 1882 and 1883, have created, in the minds of most of those who have any impression at all on the subject, the belief that the Tenth Census was extravagantly expensive. Yet no opinion could be more unfounded. The fact is that, considering the new ground covered, the Tenth Census was a marvel of cheapness. Even if we leave out all consideration of the great extent and variety of statistical work then for the first time undertaken, and treat all this as having cost absolutely nothing, we shall still find that the cost of the Tenth Census, per capita of inhabitants, exceeded that of the Ninth Census by far less than the ratio in which the cost of the Ninth Census exceeded that of the Eighth.* Yet no one ever took exception to the expenditures of 1870-72, and that work was finished to public satisfaction. A continuous progressive enhancement in the per capita cost of successive censuses is to be anticipated, even though the scope of enumeration be in no degree widened, by reason of the continually expanding detail † into which

*The cost, per capita of inhabitants, of the last four censuses, exclusive of printing and engraving, was as follows:—

Seventh Census, 1850,	5.84 cents
Eighth Census, 1860,	6.25 "
Ninth Census, 1870,	8.71 "
Tenth Census, 1880,	9.68 "

The increase from 1860 to 1870 represents: (1) the advance in wages and salaries which took place during the war period, and which, in the main, has never been receded from; (2) the addition of extensive statistical inquiries beyond what had been previously undertaken; (3) the rendering of the familiar matter of enumeration into vastly greater detail, as will appear in the next note.

† Thus, in 1860, the distribution of the population, according to ages, was into the following classes: under 1, 1-5, 5-10, 10-15, 15-20, 20-30, 30-40, and so on, by decennial periods upwards; in all, 14 classes. In 1870, under the demand for more minute information regarding the number of persons of school age, of voting age, of military age, etc., the following classification was adopted: under 1, 1, 2, 3, 4, 5-10, 10-15, 15-18, 18, 18-20, 21, 21-5, 25-30,

the traditional classes of statistics will inevitably be drawn, under the ever-growing popular demand for local and minute information. On the other hand, if the scope of enumeration is to be widened, this must be paid for, and paid for handsomely.

The cost of the Ninth Census, 1870, was, in round numbers, \$3,360,000, exclusive of printing and engraving. With the population of that period, the per capita cost was, therefore, 8.71 cents per head. The cost of the Tenth Census, including both enumeration and compilation, but excluding, as in the former case, printing and engraving, was \$4,853,350, which, with the population of 1880, yields a cost per head of 9.68 cents; leaving the total cost of all the new work, then for the first time undertaken, as well as of the vastly increased detail into which the traditional matter of enumeration was rendered, less than one cent per head of the population. Such a comparison must remove from the mind of any candid and intelligent person the opinion that the Tenth Census was marked by extravagance. No person familiar with statistical work could spend an hour in comparing the reports of 1880 and those of 1870, and not be astonished that the vastly greater work could have been done at so slight a relative increase of expense; and, in fact, this was only accomplished by the most painful economy at all points where saving was possible, and by pushing the clerical force forward at a rate of which, it is fair to say, gov-

30-35, and so on, by quinquennial periods upwards to eighty years, and thence upwards by ten-year periods; in all, 25 classes.

Even so, the occasions for distributing population according to ages were not considered to have been fully met; and, in compliance with numerous and pressing requests, including resolutions of conventions and public bodies, the ages of the population of 1880 were ascertained by single years, amounting to over one hundred specifications.

Again, in 1880, the occupations of the people were tabulated in the gross, solely. In 1870, the occupations reported were distributed among six different classes, according to sex and age. At a score of points, a corresponding increase took place in the amount of detail presented. Every such instance adds appreciably, often greatly, to the labor and cost of compilation.

ernment offices in Washington have had little experience.

Perhaps an even more striking vindication of the economy with which the national census of 1880 was conducted is found in the cost of the last State census of Massachusetts, in 1885. The schedules of enumeration here were not, at all points, co-extensive with those of the last national census: some subjects which were treated in the former set of schedules were omitted in the latter, and *vice versa*. Taken all together, however, the scope of enumeration and compilation, in the two cases, may fairly be said to have been equivalent. Yet the cost of the Massachusetts census was 9.47 cents, exclusive of the printing of the final reports. The cost of the preliminary printing, including portfolios, schedules, instructions, etc., is not known to me; but putting the United States census of 1880 on the same basis,—that is, including preliminary printing, but excluding final reports,—we should have the cost, in the latter case, 10.2 cents per capita. When it is considered that Massachusetts is densely populated, with an average approaching two hundred and fifty inhabitants to the square mile, while the national enumeration ran over hundreds of thousands of square miles, having an average of from thirty down to fifteen inhabitants, and over hundreds of thousands more of square miles having an average of from fifteen down to two inhabitants, it can only be matter of wonder that the expense of the national enumeration was not carried up to a much higher point, relatively to the Massachusetts census, than we find it to have been. Yet the Massachusetts census is justly reputed for energy, efficiency, and economy, as well as for the high scientific skill which presided over its details.

So much for the cost of enumeration and compilation in the Census of 1880. Perhaps the expenses of printing, engraving, and publishing have had quite as much effect in producing the impression of extravagance. Viewed in

themselves, those expenses were, indeed, very great; but it is altogether unreasonable and unjust to estimate them without consideration of the established policy of our government in dealing with this matter, and without making comparison with other publications, certainly no more important or generally interesting. To take a single case: the United States paid for printing the last Annual Report of the Commissioner of Agriculture the sum of two hundred thousand dollars. The cost of printing five such reports, dealing with but a single interest and covering but one-half the period between two national censuses, would exceed all the sums paid for paper, for printing, and for engraving at the Tenth Census, including the hundreds of tons of schedules used in the enumeration; portfolios and pamphlets of instructions for thirty-one thousand five hundred enumerators; some hundreds of bulletins, from one to eight pages each, announcing results as fast as ascertained; the two volumes of the Compendium, comprising eighteen hundred octavo pages, printed in a large edition; and, finally, the eighteen large quarto volumes, already published, of the final reports, profusely illustrated with hundreds of maps and thousands upon thousands of diagrams and engraved plans and sketches. Nay, we may add to the above the estimated cost of printing the four remaining quarto volumes of the final reports, and yet fall short of the cost of printing the Annual Reports of the Department of Agriculture from 1880 to the present time. Such a comparison suffices to show that, according to the policy adopted by our government, with the full approval of the people, regarding the publication and distribution of public documents, the expenditures* of the census on this side were not disproportion-

* The following appropriations were made for this purpose:—

June 10, 1880,	\$125,000.00
March 3, 1881,	125,000.00
August 7, 1882,	678,624.61
Subsequently appropriated,	11,996.36
Asked for by the Secretary of the Interior in his letter to the two Houses of Congress, December 5, 1887,	77,495.52

tionate, although the present writer is disposed to admit that a better result would have been attained had the number of the quarto volumes been held down to eighteen, as originally proposed, or even cut down to fifteen; and the smaller number of volumes been published in proportionally larger editions.

It is pertinent to ask why, if the Tenth Census was not unduly expensive, so general an impression to that effect should have been created. The question is very easily and conclusively answered, though not without a somewhat humiliating confession. The impression referred to was caused by the successive deficiency-appropriations for this service, while the necessity for such appropriations arose out of the absurdly low estimate of cost made, in 1879, by the present writer, as Superintendent of the Census. That estimate was made in entire good faith, but with an overweening desire to make the then approaching enumeration at once both the best and the cheapest of the series of national censuses. Now, the latter consideration should not have been entertained at all. The question should simply have been, How can the United States secure the most full and accurate account of its population, industry, wealth, and social condition? Whatever this might cost should have been asked from Congress, without any thought of making a saving beyond what would have been secured by a vigorous and reasonably economical administration. The people of the United States were well able to pay a fair price for the very best census they could get; and it should, in justice, be said that Congress at no time showed any disposition to pinch the service. The superintendent should have said to the Committee of Congress, in 1879: "The Ninth Census cost, for enumeration and compilation, three and a third millions of dollars. The population of the country in the interval has increased, say, about one-third, raising the cost of doing the same work, on the same scale and plan, to four millions and

a third. Add ten per cent. for the proposed enlargements and improvements, including better supervision and more of it, more correspondence, much work of experts and special agents on the difficult points of the enumeration, new statistical features, such, *e.g.*, as the acreage of crops, and even large new classes of statistics, such, *e.g.*, as railroads and telegraphs, and we should have the cost of enumeration and compilation four and three-quarters millions. With due reference to contingencies and emergencies, let us call it five millions." Had the Superintendent said this, Congress would, without a murmur, have voted the sum asked, which would have been in excess of the aggregate amount of the appropriations actually made for the service; all deficiencies would have been avoided, and the census office saved much embarrassment and not a little discredit. As it was, the superintendent actually undertook* to conduct a very elaborate census of fifty millions of people for less money than had been expended upon a far simpler enumeration of thirty-eight millions. Doubtless, the additional labors, the annoyance, the embarrassments, the distress, which he brought upon himself during the three years following, were only a proper punishment for his ambitious folly; but he ventures to add that the whole sum which he sought to save to the government would have been a very poor compensation personally for what he had thus to undergo.

The delays in the publication of the final reports have also had an effect in impairing the prestige of the Census of 1880. Those delays have, however, been very much exaggerated in popular estimation. The leading reports, those which were specially made up of purely statistical matter, were, with the single exception of that on mortality, published in 1883,—a date which, considering the

*It is not worth while to give space to a statement of the reasons which influenced my mind towards underestimating the cost of the enumeration. There were such reasons, but they are of little present interest.—F. A. W.

greater scope of the work, compares favorably with the record of any previous census.* The volumes thus published in 1883 were the two volumes of the Compendium, and, of the final quarto reports, the following: volume 1, Statistics of Population; volume 2, Statistics of Manufactures; volume 3, Statistics of Agriculture; volume 4, Statistics of Transportation. The foregoing volumes comprised nearly everything of a statistical character, with exception of the mortality statistics before referred to, which it had been usual to publish in a census of the United States; while they contained over and above what had ever before been published in this line far more than the sum of all the omissions. The justification of this last assertion will be apparent, at a glance, to any one familiar with statistical work who will examine these volumes. The issues of 1884 were volumes 5 and 6, comprising the results of a great statistical, agricultural, and economic investigation of the Cotton Culture of the United States (the bare figures of acreage and crop having been contained in volume 3); volume 7, Valuation, Taxation, and Public Indebtedness; volume 8, Newspapers and Periodicals, Ship-building, Alaska and the Fur Seal Islands; volume 9, Forest Trees and Forest Wealth; volume 10, Petroleum, Coke, Building Stones, and the Quarrying Industry. In the case of each one of these reports, a summary of the statistics involved had been already published in the Compendium of 1883.

The reports which, though generally complete in manuscript, were not published by the end of 1884,† were, with

* The single large quarto volume of the Seventh Census bears date 1853. Of the four quarto volumes comprising the final reports of the Eighth Census, two bear date 1864; one, 1865; one, 1866. The three quarto volumes of the Ninth Census bear date 1872.

† These were as follows: published in 1885, volume 11, Mortality Statistics, Part 1; volume 13, Statistics and Technology of the Precious Metals; volume 14, Mining Laws; volume 15, The Production of Coal, Copper, Iron, and the other Useful Metals; volume 16, Water Power employed in Man-

the single exception of those on mortality, all of a technical and semi-statistical character, comprising matter almost wholly new to the census, and intended to form a grand monumental exhibit of the resources, the industries, and the social state of the American people on the occasion of their tenth ten-year enumeration. Had these promptly followed the more distinctly statistical reports, they would have been greeted with universal applause. As it was, the successive volumes have received most enthusiastic commendation from the press and the statisticians of Europe,—all the way from London and Edinburgh to Vienna, Buda-Pesth, and St. Petersburg. But the American mind is highly impatient of delays; and the procrastination of several of these reports has, it is to be feared, rather impaired than increased the popular estimation of the Census of 1880, altogether irrespective of their intrinsic worth.

The delays alluded to were due in part to the financial embarrassments of the Census Office; in part, also, to the enormous pressure of current business upon the government printing-office, which allowed the census reports, during much of the time, to be taken up only as “knitting work,” when matters of greater urgency would permit; but, chiefly, to the increasing and finally complete disability and ultimate death of Colonel Charles W. Seaton, who in November, 1881, succeeded the Superintendent who had organized and thus far conducted the census. As an analyst and critic of statistical matter,

ufacturing, Part 1. Published in 1886, volume 12, Mortality Statistics, Part 2; volume 18, Social Statistics of Cities, Part 1; volume 20, Wages, Trades Unions, and Strikes. The four volumes remaining unpublished in 1887, for which an appropriation has been asked (as hereinbefore recited), are as follows: volume 17, Water Power, Part 2; volume 19, Social Statistics of Cities, Part 2; volume 21, Statistics of the Defective, Dependent, and Delinquent Classes; volume 22, Reports on Machinery used in Manufactures. The Secretary of the Interior stated, in his letter to the Houses of Congress, that ninety-nine hundredths of these reports are already stereotyped, and only await an appropriation for printing and binding. The outright failures of the census of 1880 were in respect to churches and private schools.

Colonel Seaton had no superior; but his pondering and reflective turn of mind probably interfered somewhat from the first with the progress of a work which peculiarly requires peremptory and energetic treatment, while, within two years from his accession to office, the enormous pressure of care and work incident to the service, aggravated by unkind criticisms and malevolent attacks from many quarters, developed the seeds of disease which had been planted during the war, and he began palpably to lose ground. Still, he struggled on, impatiently rejecting every suggestion for his relief, passionately exclaiming that he only desired to finish the work and die. But even this was not permitted. Softening of the brain ensued; and, after a painful period, this faithful, high-minded, and able public servant passed away, leaving his work still incomplete. Such a misfortune might befall any office, and it is to be hoped that those who have made the delays in the publication of the census reports thus occasioned the subject of small jokes will some day be properly ashamed of themselves.

So much space has been given to facts relating to the Tenth Census, both because it seems but right that a record should be made of them in our economic literature, and because they are fairly precedent to a discussion of what is best to be done for the future. Even if the scope of the census law is to remain undiminished, probably no one—certainly not the present writer—would recommend that a similar latitude be given to the publication of any census soon succeeding. In its nature, much of the work done from 1880 to 1883 is definitive, or else such as to require only slight additions or corrections from time to time. The magnificent report of Professor Charles S. Sargent on the Forest Trees and Forest Wealth of the United States—a work without a superior, if, indeed, it finds anywhere its peer, among the government publications of any country—is of the former character. The

two volumes on Water Power employed in Manufactures, and the two volumes on the Cotton Culture, are of the latter character. Much of the work in them has been done once for all; while, though the industrial and economic statements will require to be changed from census to census, a suitable and ample background will have been furnished for them in the geographical and hydrographic studies of Professors Swain and Porter and their colleagues, or in the geographical, agronomic, and chemical investigations of Professor Eugene Hilgard and his corps of assistants, embracing the highest skilled and scientific talent of the Southern States. In a greater or less degree, the same is true of many others of these reports, notably those on Tobacco Culture, on the Grazing Interests of the Frontier States, on Building Stones, on Petroleum, and on the Social Statistics of Cities, etc. The Tenth Census was more than an enumeration of population, wealth, and industry. It was a survey of the conditions of life, industry, and production, such as cannot fail to be of great value to a rapidly growing nation, such as was peculiarly appropriate to the tenth decennial census under the Constitution,—a survey which, though lacking something of completeness, by reason of insuperable obstacles in some cases, and by reason in other cases of the loss of some of its chief officers,* is yet a work worthy of the nation and of the age. The well-known names of the hundreds of men of science, economists, and statisticians who contributed to the giant undertaking afford a sufficient guarantee of the thoroughness, the conscientiousness, and the ample scientific knowledge with which their several tasks were performed; while a wealth of

* Especially the resignation of Mr. Clarence King, as Director of the Geological Survey, prior to the conclusion of the investigations into the Mining Industries, and the lamented death of Dr. George W. Hawes, who had projected and partially carried out an investigation into the Building Stones of the United States, which, had it been completed according to his plan, would have remained a lasting monument to him and to the Tenth Census.

graphic illustration brings the results within the comprehension of the least skilled and the least learned.

But while, for the reasons above stated, it is not to be expected that immediately succeeding censuses will be of such colossal magnitude, it is yet, in the judgment of the present writer, not desirable that the presentation of results should ever again revert to the traditional form of bare statistical tables, accompanied only by brief notes and explanatory remarks. In order that they may be of the widest popular and highest scientific value, the results of every enumeration should be fully and freely discussed and profusely illustrated; the various classes of facts should be carefully correlated; and all should be shown on the background of the geographical, geological, and meteorological conditions within which they exist, and in their historical connections. Our previous experience has distinctly and unmistakably shown that, if this is not done by the Census Office, it will not be done at all. The statistical skill and experience which are requisite for the work are possessed by very few, while the clerical labor involved is far beyond the means of individuals. In this view, a future census of the United States should be a mean between the Census of 1870 and that of 1880. Eight or ten volumes, less than the yearly issues of an ordinary daily newspaper, are not too much to properly set forth and array the facts concerning a nation of sixty or eighty millions, of such vast and varied industrial and social interests and concerns, once in ten years.

We have heretofore made the proviso, "If the scope of the census law is to remain undiminished": is it desirable that such should be the case? This is the most important question touching the future census of the United States. There has never been any reason but one why the vast amount of statistical work, which was charged upon the census by the Act of 1850, should be conducted by that agency. That single reason was found in the

social rawness of our people, leaving them unappreciative, to a great degree, of the importance of statistics, and in the political scruples entertained by many regarding the authority of the United States government to obtain information for information's sake. Doubtless, it is true that, when the Act of 1850 was passed, it would have been impossible to secure legislation for obtaining the statistics of agriculture and of manufactures and the various classes of social and vital statistics embraced in the schedules of that law, except under cover of the express constitutional provision for a decennial enumeration. It has been for this reason, and not because the Census has been considered the most appropriate agency for the collection of many of these classes of statistics, that one after another, and one score after another, of inquiries have been piled upon this overweighted public servant.

So long as the indicated reason existed, the action taken by the promoters of the successive census laws was wise and patriotic; for it was indefinitely better that the information sought should be obtained in this way than not at all. But have we not become civilized enough by this time, are we not sufficiently a nation now, to be able to get the statistics we require — the statistics so eagerly sought for by men of all classes, sections, conditions, and avocations in life — in simply the best way in which we can get them, without resort to a political subterfuge, and without using inappropriate and largely ineffective agencies? Upon the answer to this question turns the future of the census. Personally, a strict constructionist, I do not believe the Constitution has been outgrown; but I do believe that the American people have outgrown the little, paltry, bigoted construction of the Constitution which, in 1850, questioned in Congress the right of the people of the United States to learn whatever they might please to know regarding their own numbers, condition, and resources. It has become simply absurd to hold any longer

that a government which has a right to tax any and all the products of agriculture and manufactures, to supervise the making and selling of butterine, to regulate the agencies of transportation, to grant public moneys to schools and colleges, to conduct agricultural experiments and distribute seeds and plant-cuttings all over the United States, to institute scientific surveys by land and deep soundings at sea, has not full authority to pursue any branch of statistical information which may conduce to wise legislation, intelligent administration, or equitable taxation, or in any other way promote the general welfare.

There are two objections to loading down the census with a large and miscellaneous body of statistical inquiries. The first is that the primary object of the enumeration, the count of the people, is, in some degree, perhaps not greatly, sacrificed thereby. The attention of the community, as well as of the officials engaged, is diverted at times and in places from the all-important end of securing a just and accurate return of every man, woman, and child upon the population or family schedule, with all the required particulars of age, sex, nativity, occupation, etc. In the case of the community at large, this diversion of attention is not of very serious consequence, although an active popular interest in the enumeration is a great help to the Census Office and its agents. In the case of the actual enumerators, however, the multiplication of duties, if carried very far, becomes a real source of injury. A census agent who is carrying about a portfolio full of blanks, and has been charged with a whole pamphlet of instructions, relating to all sorts of subjects, cannot be expected to be as active, alert, and attentive in collecting the statistics of inhabitants as if he were charged with this duty only. With the thoughts concentrated upon the narrower field, with the mind constantly revolving the liabilities to loss and error within that field, it goes almost without saying that the work

would, in some measure, be better done. It is not intended, however, to lay much stress on this consideration. Certainly, the disadvantage arising from this source is vastly more than compensated by the value of the additional statistics obtained under existing laws, if, indeed, the latter can only be secured by this method.

A more weighty objection to the present system is found in the inability of the Census Office, no matter how completely organized and ably administered, to deal, at once adequately and seasonably, with the vast, heterogeneous mass of returns which are thus poured in upon it. Either the work of examination and revision must be hurried and perfunctory, or else compilation and publication must be protracted over a very long period. Probably no one who has not actually visited a Census Office in the height of its work can form a conception of the extent and variety of the materials which have there to be dealt with; while only one who has worked for years over such materials can realize the importance of giving to each successive portion a close and minute scrutiny. The schedules of population, merely, returned to the Census Office in 1890, will, when bound, exceed in bulk fifteen hundred merchants' ledgers of the largest size. The schedules of agriculture will fill three or four hundred volumes more. If we add the returns relating to manufactures, to wealth, debt, and taxation, to schools, libraries, and churches, and to deaths, it will be seen that the bare transcript of the facts with which the Census Office has to deal constitutes an immense library. Every part of this mass ought to be carefully searched by the eye of a master for duplications or omissions, for errors of conception or errors of transcription or for the results of downright fraud. Beyond this, to prescribe the forms of tabulation and compilation appropriate to each class of statistics, to superintend the progress of the work in every part, to answer the thousands of questions coming up

from the army of clerks engaged, and at the same time to direct the financial and other necessary business of such an office, is a task of monstrous labor and anxiety. Something, much, must necessarily be sacrificed of completeness and of accuracy, in order that so large a whole may be carried through within reasonable limits of time.

What is eminently to be desired in the interests of our statistical service is that the census should be confined to an enumeration of population, coupled only with one other class of statistics, to be hereafter mentioned, such an enumeration to be conducted once in ten years, as now, or, better, once in five years, as befits so great and rapidly growing a people;* while the remaining statistical inquiries now connected with the census, and even many others required to meet the increasing demand for exact knowledge, should be set on foot and conducted in proper succession, by the same bureau of the government, during the intervals of the decennial or quinquennial censuses. Such a system would dispense with the necessity for suddenly raising and suddenly disbanding a large office; would retain permanently in service a considerable force of trained clerks, enabling them to acquire skill, insight, and rapidity of working by continuous experience; and would thus at once diminish the cost and increase the value of the results obtained. Meanwhile, the work of inspection and revision by the head of the office and his most expert assistants would become vastly more effective, owing to the limited number of subjects presented at a time, and also owing to the diminished interruptions from the administrative side of the office and from persons seeking employment. The office, as a whole, taking up one or two or three classes of statistics at a time, could master the conditions of each, devise the most effectual methods of compilation and tabulation, and concentrate attention and effort to the highest effect.

* A nation which gains twelve or fifteen millions in ten years can afford to take a census once in five years, or, rather, it cannot afford not to do so.

The class of statistics which, so far as we can see, must needs be collected at the same time with the statistics of population is that relating to agriculture. Unless Congress decides that considerations of expense should have no weight in this matter, it would be inexcusable to require the entire surface of the United States to be gone over a second time, on foot or on horseback, for the purpose of collecting the productions of five millions of farms. The cost of obtaining the statistics of population and of agriculture conjointly would probably be not one-third greater than the cost of collecting the former class of statistics separately; while the impairment of the results, through the division of the enumerator's attention, would not be serious, if only these two schedules were placed in his hands. The value of a farm-to-farm enumeration of agricultural products, live stock, etc., can scarcely be overestimated. Our people are in a high degree intelligent and communicative. They recognize with remarkable readiness the interest and the right of the government to collect statistics, and they are almost wholly free from apprehensions regarding the use to be made of the information by them given.* Conditions like these distinguish our people widely from the population of any other considerable country in the world, in respect to their fitness for such an enumeration. What an American doesn't know about his own farm, or, for that matter, his neighbor's, too, is not worth knowing; and all he knows he is perfectly willing to tell. It follows from this that the statistics of agriculture, in the American census since 1850, have been of a very high order. Where a crop is cultivated only now and then, and that on a small scale, it is not unlikely to be overlooked in a certain proportion of cases; but, in regard to the main crops of each district,

* I cannot remember ever to have observed any effects, in the statistics of agriculture, of a fear that the facts disclosed might be used for taxation. Possibly, the statements regarding the value of farms may, in some degree, have been affected by such a consideration.

the statements are, in general, very near the truth. The effect of the tabulation and compilation of several millions of farms in a census of the United States is to give a remarkably just account of our agriculture, as a whole, and of the resources and productions of each section, State, and county by turns. The statistics of agriculture obtained every tenth year by the census are used as a basis for the computations of the Department of Agriculture, with reference to the intermediate years. These computations, made by trained statisticians after correspondence with some thousands of local reporters, are usually very satisfactory during the earlier years of the decade. As the reference to the census becomes more laborious and less confident through the lapse of time, the estimates of the Agricultural Department become liable to a wider range of error. Could a canvass of the agricultural interest be made in connection with the enumeration of population, once in five years, the people of the United States would be better informed regarding that interest than the people of any other country in the world.

The chief statistical branch which, under such a change of scheme as is suggested, would be detached from the census is that which relates to manufactures. Theoretically, the manufacturing schedule has always embraced the products of artisans working singly at their trades, and of the small carpenter's, blacksmith's, and wheelwright's shop, whether found at the cross-roads or in a shed attached to house or barn. As a matter of fact, the canvass of manufactures has at no time reached more than a small proportion of the productions of this class; and the tables of manufactures would be more symmetrical and less likely to create a false impression if these small "neighborhood industries" were in no case included as having been obtained by direct returns, but, on the contrary, were all to be estimated as a whole on the basis of the reported "occupations of the people," upon the

population schedule, after careful inquiry as to the rates of wages prevailing in these hand-trades in the several sections.

Thus to withdraw from the shop-to-shop canvass of manufactures the small neighborhood industries, would be to take away all the reason which ever has existed for connecting with the census this class of statistics. The facts relating to the productions of the large city, of the considerable town, or of the village clustered around the single mill or factory, could in all respects be as well, and in some respects be better, obtained aside from the general enumeration of the people; while the central office at Washington could both prepare more intelligently for the canvass, and more deliberately and critically discuss and compile the returns, if this work were to be undertaken after the tremendous pressure of the quinquennial or decennial census were altogether or mainly passed. Whether the effort should be made to obtain the statistics of all branches of manufactures as of the same date, or each great branch should be taken up by itself and treated as it best could under its own conditions and with reference to its own times and seasons, is a question requiring careful consideration,—a question to which, perhaps, answer could best be given through the results of trial. Whichever way that question were decided, the present writer entertains no doubt that the knowledge to be gained regarding these great and growing interests, through investigations set on foot, during the intervals of the general census, by a statistician of the intelligence, energy, and prudence of the present head of the national Bureau of the Statistics of Labor,* would be far larger and far more accurate than all which it can be hoped to attain through a hurried enumeration, conducted in connection with the count of population.

The only reason that could be adduced for taking the statistics of manufactures coincidentally with those of popu-

* Hon. Carroll D. Wright.

lation would be found in the supposed advantage of comparing the statistics of product directly with the numbers of the people, whether in the country, as a whole, or within each section, State, or city; but the loss of the advantages of such comparison would be more than compensated by a slight degree of improvement in the manufacturing statistics themselves. Moreover, it would generally be practicable, within five years after an exact enumeration, to compute the population of the country, at any given time, to within one per cent.; always practicable to make that computation to within two per cent. Now, if comparison were, for any purpose, to be made between population and manufacturing product, a difference of one or two per cent. in the former element would be of no consequence. No one would presume to reach any theoretical conclusion, or to propose any practical measures, regarding industry or trade or taxation or the tariff, upon a distinction so fine. Indeed, a statistician would scarcely maintain that the statistics of manufactures themselves could, as a whole, be made accurate within five per cent., although in single departments of industry, where production is highly concentrated, a greater degree of exactness may be attained.

Of the numerous subjects to which the central statistical office might apply itself in the intervals of the national census—namely, wealth, taxation, and local public indebtedness; telegraphs, railroads, and internal commerce; the lumbering, quarrying, and mining interests; the fisheries, newspapers, and periodicals; schools, libraries, and churches; hospitals, asylums, workhouses, reformatories, and other institutions for the afflicted, defective, dependent, and delinquent classes,—of these and other subjects, both old and new, of statistical investigation, it is not necessary to speak here at any length. If the Census Office, emerging from the storm of schedules falling upon it by the million, relating to population and agriculture, were given both authority and means to undertake

investigations like these, there would be little difficulty in determining their order of succession or the relative importance to be assigned to each; and though to digest the schedules of interrogatories relating to any one of these subjects, and to prepare the scheme for its canvass, would be a work requiring much discretion and great labor, the results, in competent hands, would be certain to exceed in value those which it is possible to obtain under the existing system. Nor need the expense of a service thus protracted through the intervals of the national census be greater than the cost of the less ample and adequate statistics now obtained. There is great loss, both of economy and of efficiency, in suddenly gathering together an army of statistical clerks, and as suddenly disbanding them when they have acquired a large measure of skill and technical knowledge.

There is one class of statistics now taken in the census to which in these later pages no reference has been made; namely, those relating to deaths and the causes of death. By the census law of 1850, a mortality schedule was placed in the hands of the assistant marshals; and it was sought to recover the facts of death for the twelve months preceding the enumeration. That effort has been continued through each successive enumeration to the present time; but the results have never been satisfactory, and the changes palpably taking place in our domestic life are continually rendering it more and more difficult to compass the object sought. It requires a very considerable effort to bring the number of deaths reported up to seventy per cent. of those actually occurring during the year. Nor do the omissions take place with such uniformity as to allow the results to represent, even approximately, the relative mortality of the different sections. In some stages of settlement and under some conditions of domestic life,—*e.g.*, in the older agricultural communities,—comparatively few deaths escape notice. In other communities, especially along the frontier or among mining,

lumbering, and grazing populations, the rate of omission far exceeds the average. Under these circumstances, the only value which the mortality returns of the census have ever possessed was through affording some rude means for computing the viability of the two sexes and their respective liability to certain forms of disease; of doing the same thing, but even more incompletely, regarding the several main elements of population, as white or colored, native or foreign; of outlining, though very imperfectly, the disease-characteristics of the several sections of the country; and, lastly, of affording to the medical profession some technical information, very doubtful in its nature, if taken without discrimination, yet capable of yielding, under a severely critical treatment, matter not without interest and instruction. The mortality returns of the census have never been sufficiently complete to allow an approximate life-table of the United States to be constructed, or to permit comparisons as to their respective death-rates between States and sections. The present writer would hesitate to say that it is not worth while to continue to collect mortality statistics in the census, provided nothing is to be substituted therefor. Ten years ago, he would not have scrupled to say this; but the masterly treatment of the returns of deaths at the Tenth Census, by Dr. John S. Billings, of the regular army, with the public-spirited co-operation of nearly thirty thousand physicians throughout the country, has established the possibility of securing results of high value from data so fragmentary, incomplete, and often inaccurate as those which this canvass brings into the Census Office. Yet there seems little reason to doubt that by more appropriate agencies, created for this special purpose, statistics much more worthy of the country, much more useful to the medical profession and to the life insurance interest, could be obtained, although nothing short of universal, compulsory registration of all deaths, under severe penalties for non-compliance, will put the United States on

the level of any other highly civilized nation in respect to information regarding the conditions of human life. After all is said, I think it must be conceded that the one class of statistics, among the many put upon the census since its first institution, which least fully justifies itself, is that now under consideration.

Administratively speaking, the changes above proposed in the statistical service of the United States would be exceedingly simple. The Census Office has expired by limitation of law. Instead of reviving it in 1888 or 1889, let the taking of the eleventh census be charged upon the existing Bureau of the Statistics of Labor, in the Department of the Interior,—the department which, since and including 1850, has had supervision of this work. If possible, let the census period be reduced to five years; * but this is not of the essence of the proposed change. Let the law designate the inquiries which shall be made as of date June 1, 1890. These will of course embrace those found traditionally on the population schedule,—namely, age, sex, color, place of birth, occupation, parent-nativity, illiteracy, etc.; probably, also, those relating to agriculture; possibly, also, some other minor subjects, if good reason shall be shown to exist therefor. Let the character and scope of the statistical investigations to be set on foot † in the intervals between the successive enumerations of the

* The provision of the census law of March 3, 1879, intended to encourage and assist the several States to take censuses for themselves, at a date intermediate between the United States enumerations, proved a failure.

† As the one upon whose recommendation, largely, the provision for the appointment of special agents and experts was incorporated in the census law of 1879, and as the one who had the initiative in regard to the appointments actually made under that authority at the Tenth Census, I desire frankly to say that, while many noble results were obtained in this way between 1880 and 1883, which otherwise could not have been obtained at all, or only with greatly diminished value, this feature of the existing law should undergo careful revision in a highly conservative spirit. The Census Office should still, in my judgment, be authorized to employ special agents; but the number of such officers and the term of their appointment should be limited. I think that this agency would be equally well used, with less liability to abuse, within more definite restrictions.—F. A. W.

people be duly indicated; but let the dates at which these shall be severally undertaken be left, at least within considerable limits of time, to the officers charged with the service. Let the aggregate amount which shall be expended upon all the work of the census during the decennial or quinquennial period be, after full consideration and free conference, fixed in the law; but let the application of this amount to the several branches of the service be left to the department or bureau concerned. By this arrangement, the Census Office will have means enough, beyond all question or apprehension, for carrying out the main canvass,—that relating to population and agriculture,—and at the same time will be under strong incentives to enforce all reasonable economies, since, the more is saved from that canvass, the more will be left for carrying out the statistical work of the remaining years. In this way, with a liberal appropriation in the first instance, all danger of deficiencies will be avoided. The Census Office, setting on foot the several inquiries one after another, can cut its coat according to its cloth: whereas, if all the multitudinous investigations are to be begun at once, it will be beyond any man's wisdom to provide that they shall all come out complete within a predetermined amount, unless, indeed, that amount be fixed very high.

Nor do I see that any political perplexity or difficulty would be encountered in the proposed change. To charge the work of the census upon an existing bureau of the Department of the Interior, instead of creating a new bureau or reviving an old one, certainly raises no constitutional or political question. To assign different dates to the several minor matters of enumeration is fully within the competence of Congress, if that body has the authority to direct the collection of any statistics other than those of population; and, in this connection, it is well enough to call attention to the fact that the attempt to obtain the facts relating to manufactures goes back to 1810, when Jefferson, Madison, and Gallatin were the

great lights of the dominant party, was repeated in 1820, under Monroe, and again in 1840, under Van Buren.

That the present important work of the Bureau of Statistics of Labor would not suffer injury by the imposition of even so large a body of new duties will, I think, appear when one considers how closely and intimately the two services are related; how directly the experience acquired in either would prepare its officers for taking up the other; how immediately the material gathered in one branch of investigation — *e.g.*, the facts, the names, the addresses — would be found useful in facilitating the arrangements for and the conduct of the other. This is not a case where to widen is to weaken, where to increase the scope of a service is to diminish its efficiency. Given only adequate means and high executive ability, both classes of work, each for itself, should be better done by reason of the conjunction.

Of course, if political or practical reasons are found to forbid the changes in organization or method herein recommended, nothing remains to be done but to modify the Act of 1879, so far as experience may have shown this to be necessary, and to apply it, with a view to the best results, in the approaching enumeration. That law effected a vast, an unspeakable improvement upon preceding census legislation. For the first time, it gave the central office at Washington adequate authority over the arrangements for taking the census, and over the enumeration while in progress. For the first time, it provided the proper local control and inspection of the delicate and difficult work of enumeration, through the appointment of one hundred and fifty district supervisors, chosen with reference to this duty, charged with this alone, and directly responsible to the central office, in place of the marshals of the United States courts,—officers who had been previously chosen with reference to altogether different duties, who were already overburdened with cares and responsibilities of the most urgent character and of a

widely diverse nature, and who, strangely enough, belonged to a different department of the government from that to which the census was, by the Act of 1850, committed. In place of the large and unwieldy enumeration districts, previously existing, with the greater portion of which the enumerators were, by the necessity of the case, unfamiliar, the Act of 1879 limited the districts to a size which practically secured the result that each enumerator should be acquainted, in advance, with the ground he was to traverse,—its highways and byways, its most secluded valleys and its remotest clearings; should be known to the inhabitants and known by them, an element of the greatest importance in securing official responsibility.

The long forward step taken in the Act of 1879 can never be retraced, nor does the present writer believe that the loose talk heard in many quarters about carrying the census back to its original Constitutional function, expresses the real purpose of any considerable number of intelligent citizens. What the country wants is more information, not less.

There never was a time when the demand for statistics was everywhere so great as at present. Even the troublesome and pestilent criticisms and attacks, which every feature of our official reports now undergoes, represent chiefly the widening and deepening of the public interest in the results of the enumeration, although the zeal so displayed is not always according to knowledge, nor is the spirit manifested always that of charity or candor. If the number of persons competent to criticise intelligently at least some one considerable portion of the census be ten times as great as it was, say, twenty-five years ago,—and I have no doubt that this is the case,—the number of those who, while not experts in statistics, are yet capable of making intelligent use of some integral part of what the census may declare, is at least twenty times as great. Moreover, at the present time, instead of the great majority of citizens, even among the reading and

thinking classes, neither knowing nor caring to know what the census has to tell, we find nearly the whole body of our people actively and eagerly interested in the results of a national enumeration. It is safe to say that at the census of 1880 there were a hundred demands for early information to one in 1870.

Nor are we confined to this fact alone for proof of the assertion above made. The issues of the newspaper press of to-day fairly bristle with figures. The able and astute managers of these great public organs are not acting vainly or lightly in this matter. They well know the interest which their vast constituencies feel in the statistics which reveal the social and industrial progress of the nation. Whether editors or Congressmen make the freer use of statistics may well be a matter of doubt.

Whether one compares the American newspaper of to-day with that of a former period in this respect, or compares the *Record* of the Fiftieth Congress with the *Globe* of the Fortieth as to the number and extent of statistical tables now and then; or compares the public lectures and addresses of our time with those of the *ante-bellum* age; or notes the large space devoted to political and social science in our universities and colleges and even in our high schools, in contrast with the utter blank in this department of their old catalogues; or studies the proceedings of commercial conventions or manufacturing associations,—he finds everywhere the proofs of a rapidly rising, fast advancing interest in statistical matters. To suppose that at such a time the United States—which has, almost from its beginnings, occupied the first place among the nations of the earth as to the extent and variety of its statistics, except only those relating to births and deaths—is to fall back from its high place and surrender ground to the advocates, if such there be, of political ignorance, is to assume that a large effect will be produced without a cause.

FRANCIS A. WALKER.

THE WORKINGS OF THE INTERSTATE COMMERCE LAW.

THE career of the Interstate Commerce Commission has been equally remarkable whether looked at as a matter of history, of law, or of political economy. Its work has been a surprise both to its advocates and its opponents. Instead of being an administrative body whose chief duty it was to suspend the operation of certain sections of a particular statute, it has given a series of judicial decisions which are read and quoted as authority,—not on the meaning of the Interstate Commerce Act only, but on general questions of transportation. Never, perhaps, has an important body of new law been so rapidly created and so generally obeyed. The authority of the Interstate Commerce Commission was as indefinite as that of the English Commission established in 1873, and its departure from accepted legal traditions has been much wider. Yet the American Commission has done more work in making and settling questions of law in seven months than was accomplished by the English Commission in twice that number of years. A really sound principle, uttered by a public authority which commands respect, becomes law with surprising ease. A false principle, however often repeated, is evaded and nullified.

The Interstate Commerce Act, as finally passed, contained four sets of provisions: 1. A reaffirmation of the common-law doctrine of equality of treatment, with certain special provisions as to publicity and stability of rates, which should aid in securing such equality; 2. The prohibition of a greater aggregate charge to or from an intermediate point than for the whole through route,—the so-called Short Haul Clause; 3. The prohibition of

pools; 4. The establishment of a Commission to aid in enforcing the law, but with power to suspend the execution of the Short Haul Clause in certain cases.

The general provisions against discrimination were accepted almost without debate. They simply affirmed some of the most elementary principles of justice, whose violation by short-sighted officials had given force to the public demand for railroad regulation. The railroad companies themselves did not oppose these sections. The better class of railroad managers and agents really desired to see these most serious abuses stopped; the worst class rejoiced in the belief that this section of the law would be practically inoperative; while the average railroad man, who was neither better nor worse than his fellows, was quite content to concede this measure of restriction and this amount of authority to the United States courts, lest a worse thing should befall him. These sections, therefore, met with little opposition. Some complaint was made with regard to the enforced publicity and stability of rates, but it was not a ground of serious opposition to the bill.

The short-haul clause attracted far more attention. This was no mere general restatement of common-law principles, but involved a specific prohibition of a certain form of local discrimination. It had been Mr. Reagan's intention to make this exceedingly stringent, and force the railroads to a system of charges which should not vary very greatly from equal mileage rates. The Senate bill, on the other hand, was so much milder in its requirements that comparatively few of the railroad tariffs would have been seriously affected by it. No real compromise was possible between such divergent opinions. It was, however, possible so to modify the phraseology of the Senate bill as to give color to a more stringent interpretation than that which was really intended. This was what was actually done. Fearing that they could not

command a majority for any really definite provision on this head, the conference committee approved an indefinite one, which Mr. Cullom interpreted in one way, but which Mr. Reagan, with equal confidence, explained as meaning something entirely different.

The clause against pools was, in some sense, foreign to the general tenor of the bill. Pools had been a means employed by the railroads for checking to a considerable extent those discriminations which the bill was designed to prevent. It is probable that those advocates of the House bill who thought about the matter at all, and did not vote from a general sentiment of distrust of the railroads, feared that, if pools were permitted, the railroads would comply with the requirements of the law by levelling up their through rates rather than by levelling down at intermediate points. They desired and expected that the law should produce a reduction in rates, and feared that pools might be used to defeat that end. When forced to yield their point with regard to the Commission, the advocates of radical measures were able to insist all the more strongly on the clause against pooling.

The provisions with regard to the Commission originated with the Senate committee. Mr. Reagan and the majority of his colleagues in the House were opposed to them. It was thought that such a Commission, with discretionary power to suspend the operation of certain sections of the Act, might readily make it a dead letter. At any rate, it would deprive the law, in the eyes of the railroads, of some of its most obnoxious features. This was why Mr. Reagan opposed it and why Mr. Cullom advocated it. The subsequent history of the Commission has been quite different from the expectation of either party.

Every one supposed that the duties of the Commission would be largely of a negative character. They had the power to suspend one section of the Act which was regarded as specially dangerous. In the debates on the Act,

this power had been treated as the really essential thing about the Commission. It was on account of the possession of this power that it was advocated by some men and opposed by others; while those who were neither active in support nor in opposition were inclined to regard the Commission as a sort of buffer, which was to prevent the collision between the law and the railroads from becoming too violent. On the whole, its creation was regarded as rather a favor to the railroads. The first important acts of the Commission tended to confirm this impression. The applications of the Southern and other railroad systems for a suspension of the Act were granted,—for a limited time only, but, nevertheless, in so indiscriminate a fashion as to give color to the idea that the law would become a dead letter.

Impartial observers were generally disappointed. Even those who disbelieved in the wisdom of the short-haul clause, and who had the utmost confidence in Judge Cooley and his associates, did not hesitate to express their dissent from the policy thus adopted. But they did the Commission injustice. The Commissioners did not for a moment think of making these temporary suspensions permanent. They gave them their general and sweeping character, in order that no one might regard them as a precedent for final action. From the Report of the Commission, it appears that they were, at the outset, substantially agreed upon the line of policy which they finally adopted, but that they deemed it wise to make these temporary suspensions: first, because they did not like to utter a final opinion without fuller opportunity to hear the evidence on both sides; and, second, in order that the railroads and the shippers of the country might have more time to adjust themselves to the new law without violent disturbance.

If any persons thought that the Commissioners intended to make the law a dead letter, they were soon undeceived,

—long before the definite opinion was rendered. In a hearing at New Orleans, one of the witnesses presented an elaborate argument to the Commission, showing the unwisdom of the law. To this Judge Cooley, speaking for the Commissioners, declined to listen. The witness urged that his idea was to show that the enforcement of the law was unwise, and that it should be suspended under the discretionary power of the Commission. The reply of Judge Cooley was as follows:—

We have no such discretionary power whatever, to suspend this law or any other law. This law provides that in exceptional cases we may make an order, but the question is whether an exceptional case is shown. The petitioners before us think that by their petitions they have shown such a case, and we are ready to hear your evidence, or the evidence of any other person tending to show the exception; but you produce nothing so far, in argument or otherwise, that tends to show an exception. On the other hand, all that you show tends to support the proposition that the law is in itself unwise. We have no business to assume that, and we do not expect to assume it under any circumstances. . . . It is a part of the law itself, however, that under certain circumstances we may make exceptions; but, in order to entitle us to make the exceptions, there must be some showing, first by petition and then by evidence, that the exceptional case does exist.

When the Commissioners finally rendered an opinion (June 15, 1887, *In re Louisville and Nashville*, 1 Interstate Commerce Reports, 31), they still further narrowed the range of probable exceptions. They call attention to the fact that in the bill as originally drafted by the Senate committee there was a somewhat stringent provision with regard to rates, combined with more general powers for the Commission to grant relieving orders; but that, in the bill as modified and finally adopted, not merely were the powers of the Commission narrowed, but the law itself was also considerably changed by the introduction of the phrase "under substantially similar circumstances and conditions." "After mature consideration," says Judge

Cooley, "we are satisfied that the statute does not require that the Commission shall prescribe in every instance the exceptional case, and grant its order for relief before the carrier is at liberty in its tariffs to depart from the general rule." In developing this idea, the Commissioners clearly foreshadowed the lines of their subsequent policy. The effect of this decision was not to suspend the short-haul section of the Act, but to give such an interpretation to that section as should render its suspension necessary. They try to give the mildest possible construction, but the fewest possible exceptions.

The section in question reads as follows:—

Sec. 4. That it shall be unlawful for any common carrier subject to the provisions of this act to charge or receive any greater compensation in the aggregate for the transportation of passengers, or of like kind of property, under substantially similar circumstances and conditions, for a shorter than for a longer distance over the same line, in the same direction, the shorter being included within the longer distance; but this shall not be construed as authorizing any common carrier within the terms of this act to charge and receive as great compensation for a shorter as for a longer distance. *Provided*, however, That upon application to the Commission appointed under the provisions of this act, such common carrier may, in special cases, after investigation by the Commission, be authorized to charge less for longer than for shorter distances for the transportation of passengers or property; and the Commission may from time to time prescribe the extent to which such designated common carrier may be relieved from the operation of this section of the act.

The Commission interprets this section as follows:—

1. When the circumstances and conditions are not substantially similar, the Act does not apply. The railroads can disregard it without special authority from the Commission. 2. Where the conditions are similar, the Commission will not ordinarily suspend the operation of the Act. They will not do it even when it seems to be for the interest of all parties concerned, unless the case is exceptional, and one of peculiar hardship. In the case of

Vermont State Grange v. Boston and Lowell (1 Interstate Commerce Reports, 158), the low rates for through business were the only means by which that company could secure any share of the traffic. The Commissioners admitted that it was the right and even the duty of the Central Vermont to obtain and keep up a through business, if they could do so without violation of law. They admitted that no injustice was done to the local traffic. They were entirely satisfied that a large through business is essential to this line, if it is to continue to be a useful line even for local business. They are also satisfied that the people of Vermont are largely interested in the low rates on the long-haul traffic, and that the company cannot afford to reduce the rates on the local traffic. Nevertheless, they regard the low through rates as a violation of the law, and do not consider the case as sufficiently exceptional to justify them in suspending the operation of the Act. They refuse to make such suspension where it is in some sense both just and necessary, because the case is not exceptional. Congress has passed a law which will affect many interests adversely; but, having passed it, Congress presumably intends that it shall not be generally suspended, but generally obeyed.

But what constitutes a dissimilarity of circumstances and conditions, which will justify the roads in charging less for the whole route than for a part of it? Although the Commissioners said that the railroads must decide this for themselves, they also indicated what sort of a decision was likely to meet with the approval of the Commission. The railroads might make exceptions in the case of competition with other routes not subject to the provisions of the Act. In other words, they might protect themselves against water routes or against Canadian railroads. But they could not make any exceptions because of the superior advantage of through traffic as such, even though it should be shown to be less expensive to the carrier; nor

for the purpose of encouraging particular industries or localities; nor because the long-haul traffic will be destroyed by raising rates to the level of the intermediate points.

The effect of this interpretation was greatly to reduce the importance of the long and short haul clause. Had Mr. Reagan's view been adopted, and the railroads forced to adopt equal mileage rates, it would have been disastrous to the business of the country. Mr. Cullom's milder interpretation, which simply forbade a greater *aggregate* charge for the intermediate point, brought the law into harmony with the policy which the better managed roads were trying to carry out. And the definition of "similar circumstances" adopted by the Commission just about covered the exceptions which such roads had found themselves forced to make in pursuing that policy. They had in many instances made special rates which violated the short-haul principle, on grounds which the Commissioners had pronounced indispensable; but their tariff rates were in general conformity with it, except as they were affected by uncontrolled water competition. The weaker roads were the only ones that suffered much, or found much difficulty in conforming to the requirements of the Act. The Commissioners report that this section is quite generally obeyed throughout the North and East, and in general by the more powerful corporations passing through rich districts; that the exceptions which still remain are chiefly on the Southern and Transcontinental lines. The roads that suffer are the ones which must have a share of the through traffic in order to live, and must make special concessions in order to secure it.

The difficulty of applying this section of the Act will be much diminished if other transportation agencies besides railroads be subjected to its provisions. The Commissioners distinctly recommend that it be extended to include express companies, and suggest that it might be

applied to water transportation also. Were this done, the general result of the changed system of rates would not improbably be to the distinct advantage of the railroads: the only serious sufferers would be the minor distributing centres, which would be deprived of some of the special advantages that they have hitherto enjoyed.

But, while the conflict between the short-haul clause and the practice of the better railroads was thus rendered less sharp than had been expected, the general sections against discrimination were applied with a vigor which surprised every one.

When the Act was first passed, the railroads made a strong and, on the whole, surprisingly successful effort to do away with personal discrimination in some of its worst forms. They had abolished the free-pass system in so thorough-going a fashion as to produce no little outcry from those people who thought they had a prescriptive right to travel without paying for it. They had terminated their contracts with individual shippers so generally as greatly to surprise those observers who knew how deeply rooted was the system in the railroad practice of the country. Direct, personal discriminations in rates almost ceased: where the law was violated in this respect, it was by false description of goods, false weight or classification, rather than by direct rebates or differences in charge. Having gone as far as this, the railroads thought that they were safe.

They were mistaken. The Commission soon showed that they intended to have these sections against discrimination applied to the fullest extent. The law allowed the railroads to sell mileage tickets; but the Commission insisted that they must be sold to all persons impartially, and not at reduced rates to particular classes of travellers, even when such reductions were made on grounds which might seem beneficial to the public as well as the railroads. The law said that the railroads must treat all

shippers of freight alike: the Commission insisted that the railroad agents must obey the spirit as well as the letter of this section. In *Keith v. Kentucky Central*, it was held that exclusive contracts for terminal facilities were unlawful; that a common carrier of live stock is subject to the legal duty to provide reasonable and proper facilities for receiving and discharging from its cars such live stock as is offered for transportation, free of all except the customary transportation charges. It did not fully discharge this duty by receiving on and discharging from its cars live stock at a depot access to which must be purchased. In *Providence Coal Co. v. Providence and Worcester*, it was held that the railroads could not lawfully make allowances for large shipments, which would give one dealer an advantage over his smaller rivals. The railroads might make lower rates for carloads than for parcels: this was a necessity of railroad economy. But in dealing with larger quantities, even though some advantage was realized by the railroads from the centralized shipments, their duty as common carriers forbade them to apply the wholesale principle on such. Their obligation to treat their customers equally could not be set aside on the ground of any economy in dealing with one man rather than several.

These decisions were important, because they struck directly at some of the worst abuses in American railroad management. It was the violation of these principles which had given rise to scandals like those connected with the Standard Oil Company. It was a source of general satisfaction to see the sections thus construed and applied. But there was another series of decisions, whose wisdom was more doubtful, where the Commissioners strove to prohibit local discrimination under these general sections. In the case last cited (*Providence Coal Company v. Providence and Worcester*), they required that the charges to Providence on one branch should be as low as to East Providence on another, although the former was so

crowded with traffic that it was much more convenient for the railroad to deliver freight at the other. In two cases with regard to Dakota wheat, the Commission insisted that rates on one branch could not be made independent of those on another branch of the same line, and made positive orders with regard to the amount which the company should be permitted to charge. The decisions in these cases practically assume the rate-making power for the Commission, and there is every indication that they will be called upon to apply it extensively. There is no doubt that the wording of the sections against discrimination applies to local as well as personal differences: there is some serious doubt how far a body of five men, however wise, can undertake to make railroad rates for the country.

But these doubts and difficulties belong to the future. Thus far, the career of the Commission has been a brilliant success. Instead of nullifying the law, they have made it enforceable. They have given it a construction and an application which really mean something. In so doing, they have created and are creating a body of transportation law, outside of the Act itself. They are wanting in many of the external characteristics of a court. But they have this most important characteristic, which counts for more than anything else: that their decisions are quoted as law, and are being successfully enforced, where other courts, with far greater nominal authority, have failed to accomplish their object. How is it that five men, with so little apparent power and without the authority which long usage confers, have been able to succeed where their predecessors have failed?

It is because they understand railroad business sufficiently to choose principles which can be really carried out, instead of relying on analogies and traditions derived from a totally different system of transportation and production. The tradition of the courts was that rates should be based upon cost of service. It was never systematically

applied even by those who enunciated it. So acute a thinker as Adam Smith spoke in almost the same breath of the necessity of basing tolls upon cost of service and the fact that pleasure carriages are charged higher rates than drays, without apparently perceiving that the facts contradicted the theory. Neither in turnpike nor canal tolls was the principle ever consistently carried out. Rates were based upon value or upon what the traffic would bear, quite as much as upon cost of service; and in the very earliest English railroad charters, which were based upon the model of canal charters, great varieties in rates were allowed on the same goods according as they were intended for export or for home consumption. Nevertheless, the courts clung to the theory of cost of service as a basis for differences in charge. It was the only one which they found it possible to apply readily to cases which were presented to them for action. It seemed at first sight like an easy one. But the effort to make cost the standard really proved the great drawback to all successful attempts on the part of the courts to check railroad discrimination. They had adopted a principle which could not be carried to its logical conclusion without disaster to the business interests of the whole community. The attempt to base regulation of rates upon an impracticable theory had the effect of making all such regulation almost inoperative.

The cost of railroad service consists of two elements,—operating expenses and fixed charges. The former includes the cost of handling and carrying the goods. It consists chiefly of charges for train and station service and supplies. The fixed charges, on the other hand, are those which attach to the business as a whole rather than to any particular part of it: such are interest charges, administrative expenses, and cost of maintenance, so far as this is due to weather rather than to wear. It is a principle of good railroad economy that each piece of traffic should pay its share of the operating expenses. If it did not do so, it

would be better to do without the traffic than to handle it. The exceptions to this are more apparent than real. But it by no means follows that each piece of traffic should pay its share of the fixed charges. On the contrary, if business is of such a character that it can only be secured by the lowest possible rates, any margin, however slight, above operating expenses is an advantage to the railroad. The business is made to contribute something to the fixed charges; while, if it were lost altogether, these charges would remain the same and the means of defraying them would be slightly less. There are very few roads on which shipments of coal or lumber pay anything like their proportion of the fixed charges. But if this coal or lumber business were lost, and nothing left to take its place, the community and the railroads would both be worse off for it.

It may be said broadly that railroad freight is of two kinds. There is valuable traffic, which can pay high rates, but which is, under almost any circumstances, limited in quantity; and there is cheap traffic, which cannot under any circumstances pay high rates, but which under sufficiently low ones may be secured in very large amounts. If a railroad is so rich that it can pay all its interest charges without any special effort, it is possible to pass a law demanding that these two kinds of traffic shall be treated in the same way. But the majority of the railroads are not thus situated. Many of them are scarcely meeting their current obligations. Anything which renders railroad business unprofitable will diminish the extension of facilities which the community needs; and no system of legislation is so sure to render railroad business relatively unprofitable as the attempt to enforce the same treatment for both of these classes.

The cost of handling rich ores differs but slightly from that of handling building stone, but the method by which the two classes of goods can contribute to the support of a railroad is totally different. Within moderate limits, the shipment of ore will be the same whether rates be high or

low. The supply is so far limited that a reduction in charge is apt to go into the pockets of the mine-owners, without seriously affecting the total supply or the general convenience of the community. On the other hand, the attempt to impose high rates on ordinary stone would so far check the traffic as to involve serious loss to every one; while the reduction in rates involves a gain of business to the road and lower prices to the community. From any attempt at enforced equality, the business interests of the country would lose rather than gain. Reduction in the rates on ore would have only a very slight beneficial effect: increase in the rates on stone would have a disastrous one. Either process would interfere with the power of the railroad to meet its fixed charges.

What is true as between different classes of goods is true to a less extent in the comparison between local and through traffic. The former is more or less limited in quantity: the latter can be expanded almost indefinitely. In order that a railroad may be built at all, it is often necessary that it should have the chance of securing relatively high rates on the limited volume of local business and a share in the large and cheaply handled through traffic, which can only be obtained at much lower proportionate rates. If the railroad is to be profitable under the general scale of charges to which railroads are to-day limited, it must have something analogous to the taxing power. It must be able to obtain a larger proportion of the fixed charges from those lines of business where the supply and demand are so limited that they can pay the higher rates with least disturbance of the business relations of the community and of the world. This is the principle of charging what the traffic will bear. The attempt of the courts of England and the United States to apply a different principle has been practically without effect. The attempt which has been made at one time or another in almost every country to fix schedules of rates in disregard of it has proved disastrous to all concerned.

It has so far crippled the railroads that they could not make the needed improvements and extensions, and has so far diminished railroad enterprise and railroad efficiency as to hurt the very men whom it was designed to benefit. The Granger legislation was an instance in point. A brief trial of the levelling principle was sufficient to show that it could not be applied.

Yet these attempts at legislation were often justified by the arbitrary action of the railroads in the application of their own principle. They claimed the right, not merely to use the taxing power, but to be themselves the judges of how it should be applied. Its administration was sometimes in the hands of local freight agents, who granted the special rates to the wrong lines of business and the wrong men,—a short-sighted policy, which might finally react against the railroad itself, but under which the shippers were totally helpless for the time being. Where the system of personal discrimination had taken root, these abuses were intolerable. They were worst of all in times of active railroad war, when the whole system of rates varied from day to day and from place to place.

What the Commission undertook to do was to adopt the railroad principle, but to insist that it should be impartially and equitably applied. They admitted with but slight reservation the theory of the railroad managers, but they did not for a single instant admit their claim to be the sole judges of how it should be applied in practice. They said, in effect, As far as the statutes do not distinctly prohibit it, you may charge what the traffic will bear; but, if you make this a pretext for charging what the traffic will not bear, we shall at once interfere. This was unquestionably the right ground to take. If they had followed the practice of the older courts, and tried to base rates on cost of service, the necessities of business would have been too strong for them, and would have overthrown their principle and their authority. But by taking a ground suited to the necessities of the community, and

one which the better class of railroad men admit and understand, they have laid the basis for a really effective system of regulation. Whatever may be the errors of detail, the fundamental basis of their decisions is sound. It is hardly too much to say that it is the only sound law which we have with regard to railroad rates. Everything else either concedes too much or too little to the discretion of the companies: it either gives them a power which enables them to evade their obligations as common carriers, or it attempts to limit that power on grounds which never could or would be carried to their logical conclusion.

Let us examine the theory of the Commissioners as shown by their actions and utterances:—

1. Rates cannot be based on cost of service.

While cost, as has been said, is an element to be taken into account in the fixing of rates, and one of the very highest importance, it cannot, for reasons well understood, be made the sole basis, but it must in any case be used with caution and reserve. . . . Any attempt to apportion the cost therefore would at the best, and under the most favorable circumstances only reach an approximation. This is so well understood the world over that the propositions which from time to time have been made in other countries to measure the charges of the carrier by the cost of the carriage solely, have always been abandoned after investigation. (1 Interstate Commerce Reports, 63, 64.)

2. It may be good public economy as well as good railroad economy that different kinds of traffic should be treated on different principles, independent of differences in cost of service.

It is very evident from these figures that neither on the local traffic alone, nor on that and the joint traffic can a first-class road be maintained. It is, therefore the right and we may say the duty of the managers of the Central Vermont to obtain and keep up a through business, if they can do so without injustice to the local traffic and without violation of law. No injustice is done to the local traffic by taking through traffic at very low rates, provided the doing so neither makes the local traffic more expensive nor otherwise incommodes it. . . . We are also satisfied that the people of Vermont are largely interested in the low rates on the long-haul traffic. . . . It

is highly probable that if the people of that State pay high rates on local traffic they are fully compensated in the low rates on long-haul traffic. (1 Interstate Commerce Reports, 180.)

Though the Commissioners in this case decided against the legality of the particular rates in question, they did so not because this was unjust discrimination under the general clause, but because the short-haul clause was the law which governed their action, and could not be departed from by them on considerations "of equity or of what would be for the interest of the parties concerned."

Every railroad company ought, when it is practicable, to so arrange its tariffs that the burden upon freights shall be proportional on all portions of its line, and with a view to revenue sufficient to meet all the items of current expense, including the cost of keeping up the road, buildings, and equipment, and of returning a fair profit to owners. But it is obvious that, in some cases, when there is water competition at leading points, it may be impossible to make some portion of the traffic pay its equal proportion of the whole cost. If it can then be made to pay anything toward the cost, above what the taking of it would add to the expense, the railroad ought not, in general, to be forced to reject it, since the surplus, under such circumstances, would be profit. As has been tersely said by M. de la Gournerie, formerly Inspector-General of bridges and railways in France, a railroad "ought not to neglect any traffic of a kind that will increase its receipts more than its expenses"; and long-haul traffic which can only be had on these terms may sometimes be taken without wronging any one, when, to carry all traffic, or even the major part of it, at the like rates, would be simply ruinous. (1 Interstate Commerce Reports, 79.)

For many years it has been the practice of the railroad companies connecting Boston with western points to make the rates from such points to Boston, upon grain and provisions for export, as low as the rates to New York, although the rates upon property for local consumption have during the same time been higher to Boston than to New York, the distance being somewhat greater. The rates to the seaboard and abroad, it was shown, are in effect determined by the shortest line from the interior, which for this purpose is the Pennsylvania line; the other lines conforming substantially to those rates as a security to participation in the traffic. . . . Making the allowance in some form has been essential to the existence of the trade, since the ocean rates from Boston and New York are not materially different

and higher interior rates would exclude Boston altogether from participation in the foreign trade . . . As explained by the petitions and the evidence adduced in their support, the rebate has for its purpose to correct an inequality that would otherwise exist, and which, by making the cost of foreign shipments by way of Boston greater than by way of New York, would practically exclude shippers from the choice of the Boston route, though the distance from interior points to the foreign market would be practically no greater by that route than by the other. . . . If such is the real nature of the so-called rebate . . . and if no discrimination is made between persons engaged in the foreign traffic, but the rebate is paid impartially, and only as a means of protecting the Boston route for the export trade against an excess in charge that would be ruinous to it, then it is obvious there is no occasion for calling upon the Commission to give sanction to a practice which would be legal without it. (1 Interstate Commerce Reports, 24-27.)

3. This principle cannot be held to justify artificial cases of inequality.

It is just as much the duty of the common carrier, in making its low rates on long hauls, to consider whom they may ruin as whom they may build up; and, while the carrier cannot be held responsible for the consequences which flow legitimately from tariffs impartially arranged, it cannot justify on the ground of public benefit the unequal rates which, however beneficial to some, may be equally mischievous to others. A great establishment, strengthened by the favor of public carriers until it acquires the power to crush competition, and actually exercises that power, may by that very fact become an enemy to the civil State; and no benefit it can give to the public, in the low prices of its commodities or otherwise, can compensate for the general sense of wrong which those must feel who are injured by it, or for the sentiment which grows up in view of its operations, that the law fails to give the equality of right and privilege which it nominally promises. (1 Interstate Commerce Reports, 68.)

In applying the principle laid down in this decision the Commissioners will themselves examine whether the traffic will bear a particular rate. In exempting the railroads from the obligation of basing their rates on cost of service, they do not free them from all control. On the other hand, they subject them to a control which may, under certain circumstances, be even more stringent than the other.

While the inhibition of the fourth section of the statute against charging more for a shorter than for a longer distance over the same line does not literally apply, the defendant is, under the circumstances, required to make its rates reasonable on both branches of its road. If the two lines were separately owned and operated, competition might substantially equalize the rates: And the fact that one company controls parallel lines affords no warrant for giving superior advantages to the patrons of one line, and denying similar advantages to those of the other line. It may not be essential that the rates on the two lines should be identical. Some difference on account of greater distance and increased operating expenses, and the conditions affecting the traffic may be reasonably permissible. Nor is it enough that independently considered, as if the parallel line did not exist, the higher rates might be deemed reasonable. They should be relatively reasonable, in view of their relations to each other and their effect upon the public, in order to prevent undue and unreasonable prejudice and disadvantage, and thus in their results become unjust and unreasonable. . . . If the different rates on the two routes worked no hardship or injustice to any one, there would be no occasion for corrective remedies; but when, as the fact was shown in this case, the producers and millers located in the petitioning towns and along that division are seriously injured, and their business disastrously affected by the double flat rates charged them, the public interests are concerned, and a case is presented demanding redress. *These rates obviously preclude competition with the Minneapolis and St. Paul mills and those on the River Division. . . . The act to regulate commerce demands such adjustments of rates as shall not discriminate unduly in favor of the business of certain localities, and prove destructive to similar pursuits in other localities. (Boards of Trade Union of Farmington et al. v. Chicago, Milwaukee and St. Paul, 1 Interstate Commerce Reports, 215.)*

The decision in the case last cited is almost identical in its effects with similar decisions in England: in its grounds and principles, it is totally different. The final reason for enforcing the equality is that the traffic will not bear other treatment. Questions of cost are made an incidental means of determining the amount of inequality permissible, rather than a criterion of the right of the railroads to act as they do. This distinction is important. It shows why the common-law principle of equality may be successfully applied by the Commission when it has

failed in the hands of the courts. Equality based on what the traffic will bear is a very different thing from equality based on cost of service.

The adoption of this basis for equality is simply the recognition of a sound principle of political economy, which we cannot better formulate than in the words of the Commission itself in their report to the Secretary of the Interior. "The question of rates is often quite as much a question between rival interests and localities as between the railroads and any one or more of such localities or interests." "A railroad company may be rather a nominal than a real defendant; the rate, the classification, or the practice complained of may concern some class of its customers who approve and defend it more than does the railroad company itself, and the company might be entirely willing to make the change demanded, but for the fact that its doing so would bring forward a new class of complainants."

This strikes the point squarely. There is not in American railroad practice a collision of interest between shippers as a class and railroad owners as a class. Laws based on the supposition that there was, have done much more harm than good. It is for the interest of the shippers to have railroad profits high, in order that railroad facilities may be increased: it is for the interest of the railroads to reduce their rates, because the progress of invention is constantly making it relatively better economy to do a large traffic at low rates than a small one at high rates. But the real ground for so much well-founded complaint is that railroads have made reductions for one man and not for another; producing an inequality whose benefit to the company is but trifling, while its advantage or injury to the respective classes of shippers is enormous. It was the error of the English Commission that they tried to treat these differences as purely matters of railroad economy. It is the merit of the American Commission to have treated them on broader principles of political economy.

The kind of work begun by the Massachusetts Commissioners nearly twenty years ago is being carried out to-day over a wider field, and applied to far more difficult problems.

For the success of the Commissioners in the past few months must not blind us to the fact that in the immediate future they are likely to meet with a series of difficulties which will tax their skill to the utmost. It is an easy thing for a man who understands the subject to state sound principles. It is a hard thing, however good his understanding and however sound his principles, to apply them to anything so complicated as the railroad business of the United States.

The difficulties under the short-haul clause will probably not be very great. The Commissioners, as we have seen, have generally disclaimed the intention of making exceptions. Where foreign competition existed of such a character as to constitute substantially different circumstances and conditions, the railroads might take the responsibility of making the exceptions themselves. Where such foreign and water competition did not exist, the Commission would not, as a rule, afford any relief. Each decision under the fourth section shut off a vast amount of possible questioning.

But the decisions under the second and third sections have had precisely the opposite effect. They have widened the possible jurisdiction of the Commission, and have opened more questions than they have settled. For instance, in two recent cases against the Chicago, Milwaukee & St. Paul Railroad, it has been held that the discrimination was unreasonable and illegal, if rates on one branch were made much higher than on the other; and the Commission gave orders as to the extent to which reduction in rates must be carried. Where is this process to stop? Will it not involve the assumption of a general rate-making power on the part of the Commission and its agents? Nothing is more difficult than to determine the

relative circumstances and conditions of broad-gauge and narrow-gauge lines. Yet one order has been made which involves a determination on this point. There is hardly a railroad which owns lines of both classes against which this order may not furnish a precedent for possible complaints.

Again, the short-haul clause prevents the roads from granting lower rates to through points than to local ones. The railroads have to some extent evaded that requirement by a system of carload rates. Compared with parcel rates from the same locality, the difference in carload rates seems unreasonably great. But the railroads assert, and probably with good reason, that the business of the distributing centres is largely carload business, or at least can be accepted and treated as such, while the business of local points is chiefly parcels business; that there is, therefore, a general fairness in the system apart from special cases of apparent injustice. The Commissioners have already admitted in so many words that the through business is more economical for the railroads, and that it may be desirable on considerations of equity to enable them to offer specially low rates to such business. How far will they apply this principle to the carload-rate case? Whichever way they decide this question, the consequences will be important to the country and rather critical for the Commission. If they allow the present practice, they allow the continuance of favors to large distributing centres, they will perpetuate indefinitely the division of labor between city and country, which it was the object of the most active promoters of the law to prevent. If, on the other hand, they decide against the legality of the practice, they will interfere with existing business methods to a most dangerous extent, in the enforcement of a principle whose equity they have themselves called in question.

Finally, the possible difficulties in the enforcement of the law are greatly increased by the prohibition of pools.

The motives which led to this prohibition have already been indicated. But, whatever may be the opinion as to the need for such prohibition, there can be no doubt whatever that it renders the difficulties of the Commission vastly greater.

In the first place, the prohibition of pools greatly increases the difficulty of the railroads in maintaining systematic tariffs. This has not been as yet clearly perceived, because through rates during the past months have been extremely well maintained. When the new law went into effect, the railroad men did not know what were their rights or their duties under it. One thing they knew,—that they were tired of fighting, and were glad to make the law for the time being a pretext for the cessation of rate wars. The danger of disobeying the law was greater than the danger of suffering from the cut rates of a rival. But there is reason to fear that this state of things cannot last. The railroads cannot keep it up, even if they would. The recent condition of things in the dressed-meat business is instructive. This is now in the hands of a comparatively small number of large shippers. One shipper at least threatened to withdraw his business from the Grand Trunk, unless that line would grant lower rates than the others. To do without this business would have involved an appreciable loss to the Grand Trunk. But the other roads could not grant the differential without danger that the other large shippers would transfer their business to the Grand Trunk. Under the old system of pools, the matter would have taken care of itself. Under the present system, there was no possible solution without a war of rates. The Grand Trunk could not do without the differential: the other roads could not admit it. Where business was so compactly organized that the shippers could transfer it almost at will from one road to another, they had it in their power to precipitate a war of rates. The instructive thing in the whole case is that this was probably done on purpose; that the Grand

Trunk, as well as the other roads, was reluctant to enter into such a war, but that as long as rates were at any figure above operating expenses they could be forced into it. In other words, it means that, in the absence of a pooling system, a combination of shippers has the power to avoid paying anything like a fair share of the fixed charges. A statute for prohibiting railroad pools has transferred the authority to a less known and less responsible pool of shippers.* What were the results in the case of the Standard Oil Company before the trunk-line pool had developed, we know only too well. There seems to be danger that the same kind of result will follow in other lines of business now that pools are prohibited.

The German government was so strongly impressed with the fact that even State railroads under similar conditions were at the mercy of a ring of shippers, that it has not only legalized pools and practised pooling, but has of late actually forbidden the shippers to prescribe the route over which their traffic shall be carried. In other words, it has not merely allowed division of traffic, but has prohibited everything else. It remains to be seen whether our railroads are strong enough to resist the demands of organized shippers, when the State railroads of Germany could not, under similar circumstances, do the same thing.

But there is another respect in which the possibility of rate war greatly complicates the workings of the Interstate Commerce Law. When rates are maintained and railroads relatively prosperous, it is possible to do a great many things which are otherwise impossible. A railroad which is paying ten per cent. dividends can be regulated a great deal more severely than one which can barely preserve its property from foreclosure. The very weakness of railroads constitutes a source of strength for resisting government interference. If a particular series of decisions

*The railroads are trying to meet the difficulty by evading the clause against pools,—adopting a policy which will virtually result in division of traffic, without violating the letter of the law.

or statutes palpably lessens the railroad facilities of a community, it becomes much harder to enforce them. The more railroad profits are reduced, the greater the number of cases where this difficulty is felt. It is here that the laws of political economy produce their final adjustment. If a line of policy makes railroad profits unusually high, the country gets more railroads; if it makes profits low, there are fewer railroads. The lines may not always be wisely built or well operated, but the general effect is incontestable. A country with an artificial system of rates based upon cost of service will have fewer railroads and smaller train service in proportion to its population. Germany and France have less than Belgium; Belgium has less than England; England, less than America. If America had been content with as little train service per head of population as Germany has to-day, America could have had almost any system of rates she pleased. But America was not content. Railroad enterprise was a necessity to the growth of the country. If it was found that a particular system of railroad regulation stopped railroad development, the application of that system was checked. The principle was slow in working out its results, because, if a railroad was once built, it was there more or less permanently. But this was not sufficient to prevent the reaction against excessive regulation from being felt. Growth was a necessity for our railroad system. If the laws caused railroads to remain stationary, the community suffered, and sooner or later modified the laws or suffered them to remain in abeyance.

If the Interstate Commerce Law, whether by its prohibition of pools or by its provisions with regard to discriminations, seriously reduces railroad profits, this difficulty will make itself felt. The Commissioners are undoubtedly aware of the danger, but they do not seem to have a full conception of its magnitude. They have more than once spoken as though a railroad by lowering its charges on one line of traffic took the opportunity to make up for it

by a different policy on some other article (compare 1 Interstate Commerce Reports, 66). This view has almost no foundation in fact. If a railroad has had a tariff arranged with even moderate intelligence, a loss on one article due to some disturbance of rates is not made up on other articles. If the loss is only temporary, it is often made up by some slight manipulation of the construction account; but sooner or later it comes out of the pockets of the stockholders. The Commission are right in making the question whether rates are relatively reasonable the important one. But this is not because the low rates in one case are made up by the higher rates in the other. There is not one case in a thousand where the high rates are raised because of the existence of the lower ones. They simply are harder to bear on account of the advantage which the man who gets the low rates has for competing in the markets of the world. Whatever direct loss there is from the low rates comes from the railroad owners.

It is impossible to say where the loss in railroad enterprise begins to be greater than the gain from stopping artificial inequalities. The point is very easy to pass: it is the duty of the Commission to see that we do not pass it. It fortunately happens that the system of railroad rates is such that some of the worst abuses can be checked without serious loss to the railroads; and, on the other hand, that some of those things which are popularly complained of, and whose cessation would involve great loss to the railroads, really do very little harm to any one. If the Commission can so interpret the law as to prohibit practices of the former class and allow those of the latter class to continue, they will have solved their problem as far as it is capable of solution. The general principles which they have chosen are so good that there is every reason to hope they will be equally successful in the more difficult task of applying them to doubtful cases.

ARTHUR T. HADLEY.

THE RATE OF INTEREST AND THE LAWS OF DISTRIBUTION.

IN a trenchant article in the April number of the *Quarterly Journal of Economics*, President F. A. Walker has restated, with all his accustomed lucidity and wealth of illustration, the special doctrine of "rent of ability" being the real source of business profit, which attracted so much attention among economists on the publication of his *Political Economy* four years ago. The theory that the normal "wages of superintendence" are determined in a manner exactly analogous to that in which "Ricardian rent" of land is fixed has already found wide acceptance among American and English economists, and will undoubtedly form a main factor in that reconstruction of the theory of wealth distribution now being undertaken.

President Walker, indeed, holds that the doctrine of "rent of ability" itself furnishes the last link that was wanting to the completion of the theory, and that it "yields, in conjunction with well-approved theories of rent, interest, and wages, a complete and consistent body of doctrine regarding the distribution of wealth. It is not to be disputed that we have, in this view of business profits, the keystone to bind together the other members of the arch in a symmetrical whole, spanning the entire field of distribution." While fully accepting this statement, as far as regards rent and the "wages of superintendence," I venture to think that some further development of the doctrine of interest on capital will be necessary before the problem of income distribution is completely solved. The share of the annual produce defined as interest must be determined as accurately as the other three shares, and independently of all of them, before we can be assured that our assumptions are even theoretically correct.

The article in question deals only incidentally with the determination of the amount of interest on capital; but, as President Walker does not hint at any novelty, I shall perhaps not be doing him any injustice in quoting his own words as a convenient summary of the current doctrine:

Interest is to be deducted as the remuneration for the use of capital, its amount being determined by the relation of supply and demand, but always tending, through the operation of a natural law on which all economists, from Adam Smith down, have delighted to dwell, towards a minimum,—the minimum, in the case of interest, being that rate which will induce the possessors of wealth to refrain from consuming it for the immediate gratification of their tastes and appetites, and to save and store it up to the extent of making good the waste and wear of the existing stock of capital and of answering the demands for the enlargement of that stock to meet new occasions for productive expenditure. This condition may imply, in one state of society, an interest rate of eight per cent.; in another, of five; in another, of three. But, whenever the rate is eight per cent., it continually tends to become five; and, whenever it is five, it continually tends to become three, inasmuch as the occasions for an increased expenditure of wealth for productive uses are certain to be transcended, at any given rate of interest, by the rapid accumulations of capital, which go forward by geometrical progression.

I venture to suggest that this doctrine, even if correct, affords no such sufficient determination of the share of interest, in relation to the other shares of the annual produce, as would warrant us in accepting it as adequate for a theory of distribution. It is one of the acute remarks in Mr. Henry George's *Progress and Poverty* that, "in the current statement, the laws of distribution have no common centre, no mutual relation; they are not the corresponding divisions of a whole, but measures of different qualities." (Book III. chap. vii.) It appears to me that the current doctrine of interest, as here applied in a theory of distribution, is another surviving remnant of those obsolete economic errors which incited Mr. George's eloquent but ill-judged onslaught. It has no "mutual relation" with the laws of rent, wages, and rent of ability.

It is not defined in the same terms. It is by no means apparent that it exactly completes the annual sum of produce to be divided. Let us suppose that there is an exceptionally large produce due to natural causes one year: does the surplus go to rent, interest, rent of ability, or wages? That such an event might ultimately tend to increase wages, as President Walker would suggest, may be admitted (though not because wages take the residual product); but the problem to be solved is the classification of the produce of each year, and the laws of distribution must all be given in similar terms, so as theoretically to account for the whole annual product, and to account for it with scientific exactness.

Many other criticisms on the theory of interest might be made, did time permit. It might be observed, for instance, that, whereas rent, wages, and rent of ability are defined as amounts, interest is spoken of as a "rate." But we are concerned with dividing an aggregate amount; and the law of interest must therefore be given in terms of quantity, and not in terms of a percentage upon an element outside the problem, such as the pecuniary valuation of the capital stock, which itself depends upon the current rate of interest. Professor Sidgwick has abundantly shown* that this leads to considerations of a very complex character, and it is clear that the *amount* of the produce to be assigned to interest is not thereby determined.

But the theory has been attacked in an even more fundamental point. It is by no means admitted that the accumulation of capital depends solely or even mainly upon the rate of interest. Economists have always laid stress upon the other motives for thrift, which led, for instance, the French peasant up to 1871 and the Maltese cottager up to 1886 to hoard metallic currency without the inducement of interest at all. The enormous and universal increase of investments in savings banks, where

* *Principles of Political Economy*, Book II. chap. vi.

but trifling interest is paid, shows how little the rate affects even the investment of capital. Indeed, there are everywhere a large number of depositors in savings banks who deliberately exceed the limit on which interest is allowed, content to get only safe custody for their savings. And Professor Marshall, moreover, ingeniously shows that the rate of interest acts partly in a contrary direction, stimulating accumulation in some directions to a greater degree when the rate is low than when it is high.

The fact is that President Walker has as yet failed to carry on to interest that powerful economic analysis which he has already applied with so much success to rent, profits, and wages. Throughout the whole science, it is of the utmost importance to distinguish between what are merely scientific categories, not necessarily possessing separate objective existence, and those actual payments from man to man which are often called by the same name. President Walker does not deal with the rent actually paid by Farmer Jones to his squire, nor with the wages paid by Jones to his laborers. It is with rent and wages as scientific categories that he is dealing, and he makes abundantly clear to how great an extent the economic rent and wages may differ from the payments popularly known by those names. But, when he comes to treat of interest, he is content to confine his view to the actual payment made by the borrower of a certain form of capital to the lender of it. But suppose the lender of it reclaims the loan, and uses the capital himself: does he cease to obtain interest? It may be confidently asserted that, in political economy, interest has no more to do with the lending of capital than rent with the hiring of land, and that the popular "rate of interest" is no more the interest with which we are concerned than the annual price of an Irish holding is the "economic rent" of that plot of land. It is evident that something

more than a reference to the market rate for loans on good mortgage security is necessary, before the doctrine of interest can be brought into line in a complete theory of distribution.

It will be well here to guard somewhat further against what is a serious ambiguity of language. Professor Sidgwick * has already pointed out the difficulty, as well as the necessity, of distinguishing accurately between "the interest paid to professional lenders of money" and "interest in the sense with which we are concerned with it in the theory of distribution." But there are, in reality, four senses in which the word "interest" is commonly used, all to be carefully distinguished by scientific economists:—

1. The current *rate* paid "in the money market" for short loans of credit or capital in certain forms (chiefly legal tender currency). This is sometimes called the "rate of discount," and it depends on the relative supply of the particular form of capital.
2. The current *rate* paid for more permanent loans on good security. This may conveniently be distinguished as "loan interest": it varies quite independently of the rate of discount, which it usually exceeds, and it depends on the relative supply of capital in any mobile form seeking durable investment.
3. The normal *rate* to which the variations in the current rate of "loan interest" tend to conform over a long period in any community. This is the "interest" usually dealt with by economists, which "tends to equality" and to decline.

None of these can be the "interest" to be defined as a share in the distribution of the annual product, if only because each of them is merely a percentage rate on an arbitrary valuation of an element not within the definition. The interest with which we are concerned must

* *Principles of Political Economy*, Book II. chap. vi.

clearly be a definable *quantity* of produce. I propose to call it "economic interest," and to define it provisionally as

4. The amount of the annual produce after deduction of economic rent of land, rent of ability, and normal wages.

It will therefore be seen that this definition makes interest the residuary element instead of wages. It remains to justify this by independent definition of the share designated "economic interest," and by demonstrating its place in the theory of distribution.

The weak point of the usual theories as to the distribution of income is that they ignore the prior determination of the distribution of the Means of Production. It appears to me impossible to work out a consistent and complete theory as to rent, interest, profits, and wages, without first postulating an economically normal distribution of labor, skill, and capital upon the land. I shall therefore attempt a preliminary sketch of this distribution in a state of economic equilibrium.

The annual produce of an advanced industrial community consists of a complex aggregate of commodities and services, produced under the most diverse conditions, varying indefinitely in advantage. The soil, that great mother of all utility, differs in fertility from field to field and from mine to mine. The other physical conditions of industry, such as climate, temperature, supply of sources of energy, and the like, are of equal variety. Human knowledge and skill, without which all labor is in vain, vary from individual to individual. Capital affords more aid to the hands of the laborer in one position and in one occupation than in another. And other monopolies, by no means wholly artificial, interpose, as we shall see, to an important extent, to prevent equality of return to equivalent toil. It is this inequality of return which is the cause alike of rent, interest, and rent of ability; and our task is now to distinguish them from wages and from each other.

Each worker endeavors to secure a position in which his labor will be applied under the most favorable circumstances, and competes with his brethren throughout the industrial community in a struggle for the fortunate opportunities. But the operation of the "law of diminishing return" prevents them all crowding, like flies on a honey-pot, to the best site. Instead of the whole wealth production being concentrated at one point, the maximum net utility (that is, commodity in proportion to "efforts and sacrifices") will be found to result from one particular arrangement of labor, skill, and capital upon the land; and it is to this particular distribution of these elements that industrial communities must steadily tend. The ideally perfect arrangement may never be actually reached, since it must be itself constantly changing as the complex conditions of international relations alter. But the play of economic forces causes a steady approximation to this "line of least resistance," and it may therefore be assumed as the normal in our theoretic statement.

This normal distribution of the Means of Production, producing the maximum return of utility in proportion to "efforts and sacrifices," can be proved mathematically to be that in which the last "dose" of capital, skill, and human energy, applied at any point, causes as great a return for equivalent labor as the last "dose" applied anywhere else. The distribution of the means of production over the earth constantly tends to conform everywhere to this law of "equal returns to the last increments."

Of the main factors in wealth production, one large class—the land and the other physical conditions, such as climate, temperature, or water power—are fixed, as regards position in space, so as to be almost entirely beyond human control in this respect. In our industrial co-operation, we must therefore bring Mahomet to the mountain, and form the requisite ideal combination by

varying the amount of human energy, skill, and capital applied to particular sites. We must of course assume, in this pure theory of economic distribution, that perfect frictionless mobility and universal omniscience prevail throughout the industrial community.

Human energy, in the form of ordinary labor force (omitting for the moment skill and capital), will obviously tend to be so distributed upon the land that the return of commodities produced by the last increment of force applied to any particular field will yield just as much as it would have done if added to that being applied to any other field. The return to the first labor force on the fertile Lothians will be much greater than the return to the first labor force applied to the rocky slopes of Ben Nevis; but it will clearly be economically advantageous not to abandon increased cultivation on the Lothians until the point is reached at which the last increment of labor force produces no more there than the last increment applied in the worst circumstances somewhere else. Up to that point, it would be more advantageous for the worker in the worst circumstances elsewhere to be transferred to the as yet unexhausted Lothians; and there would be a constant tendency for such transfer to take place. In perfect economic equilibrium, the last worker on each field produces the same amount of commodity per working day.

It is not less clear, though less commonplace, that skill or industrial ability of every kind tends to be distributed in an analogous manner. Its ideal economic distribution is equally expressed by the law of "equal returns to the last increments." But, as ability must always be "fixed and embodied" in particular human beings, and as these must each be taken with the *défauts de ses qualités*, it cannot attain so perfect a mobility as ordinary labor force or capital. Nevertheless, there is a constant tendency for as much ability to be employed in each industrial process

as can be employed there to greater advantage than elsewhere. So long as the employment of a more skilled workman in any concern would cause a greater increase in the aggregate produce than is caused by his employment elsewhere, there will be a constant tendency for the transfer to take place. The return to the last increments of skill employed will, in economic equilibrium, be equal at all places and in all occupations.

We are now prepared to deal with the distribution of capital, the only remaining factor in wealth production. It can, I think, be shown that this, too, is expressed by the same law of "equal returns to the last increments." Capital will tend to flow towards those opportunities in which its use will afford the greatest return. Each worker will be able to enjoy the assistance of as much as he can effectively demand; and the limit of his effective demand is reached when any further addition to the capital he uses would not result in so great an increase of his product as that final increment of capital would enable some other worker to produce. This limit is reached more quickly in the case of some workers than of others; but it is, in economic equilibrium, reached in every case, since, until this happens, there is some worker in a position to attract additional capital to himself from some other employer, by ceding for its use a larger product than that employer could afford. Conversely, the limit cannot economically be permanently overpassed in any case, since, otherwise, the product caused by the use of the last increment of capital would not be equal to what that portion would produce if applied elsewhere. The worker who could thus employ it to greater advantage would be able to cede a larger product for its use than its former user could afford to cede. We shall see hereafter that this equality of return to the last increments of capital is the true form of the ordinary dictum that "profits tend to an equality," so mercilessly exposed by Professor Cliffe Leslie.

The combination of the factors of production in a state of economic equilibrium may therefore be declared to be such that the last increments of labor force, skill, and capital in use at any point cause exactly as great an increase in the aggregate produce as those last increments of the factors cause which are in use at any other point.

We are now in a position to determine the normal distribution of the product of a community in economic equilibrium.

We start from the "margin of cultivation," where ordinary labor force is employed on the worst land in use. We must, at the same time, select the corresponding instance as regards skill and capital, so that we may assume as the datum-line the worker using the minimum of skill and capital, engaged in wealth production under the most unfavorable circumstances. It is obvious that the return to his labor is the measure of the wages of similar workers throughout the community. They do not receive more, because, if they did, our contemplated worker would abandon his outpost on the margin of cultivation, to go and compete with them. They do not receive less, or they would leave their positions to take up farms alongside of him. His produce includes no economic rent either for land or skill, for he has none of either which others covet; and, though theoretically it may include a trifle of interest for his minimum of capital, we may ignore this as merely equivalent to that "gratuitous capital," such as roads, pavements, and policemen, elsewhere provided free of charge to other producers.

We accordingly reach here a standard of what it will be convenient to call "economic wages," to be defined as the return to the labor of the ordinary unskilled worker, with the minimum of capital, on the worst soil at that time in use, and in the worst natural circumstances. This is the true "margin of cultivation," on which all economic deductions depend. To this normal level the wages of all

unskilled workers tend to come; and from this economic datum-line the extra produce known variously as rent, interest, wages of superintendence, or generally as profits or surplus value, must be computed.

Assuming, as Ricardo and apparently Karl Marx always did, an entirely unregulated increase of population, it is evident that this "economic wages" is coincident with Ricardo's natural or normal wages, and with the wages worked out by Marx as the inevitable result of capitalism; that is to say, the minimum produce upon which the average unskilled laborer will maintain himself sufficiently long to rear a generation to replace him. If, at any moment, the "economic wages" should be in excess of this minimum, the resulting rapid increase of population would force the worst laborers into still worse positions beyond the former "margin," where the return to their work would not be so great. If, on the other hand, it fell below the minimum, there would, *ex hypothesi*, be a diminution of population, which would allow the worst surviving laborer to move to more advantageous surroundings left vacant by this modern "Black Death."

Even Marx, however, did not assert these "normal wages" to be invariable. The minimum requirements of the laborer were admitted by him to vary with his intellectual and moral condition, and to be capable of change. It seems now more correct to say that the amount of the "economic wages" determined by the position of the margin of cultivation is only one of the factors on which variations of population depend, and that the position of the margin of cultivation is itself partly determined by the "standard of comfort," which each social grade does not willingly abandon. Yet much truth unfortunately still remains in the Ricardian and Marxian theory. The involuntary check on population constantly exercises its frightful influence, especially on the infantile death-rate. The death-rate of infants in Bethnal Green is twice that

in Belgravia. If the iron hand of capital be uplifted ever so little, so that market wages rise above normal, fewer of the families of the crowded toilers succumb to the misery of their lot; and the number of their class automatically rises, so as quickly to bring down wages again. This involuntary and automatic action is a potent factor in keeping down unskilled wages to the minimum level in the slums of our great cities. It is the economic form of Mr. Walter Besant's "law of elevenpence ha'penny."

It is unnecessary here to pursue the subject of market wages as compared with normal, or of the different remuneration of the various grades of labor. It must suffice to say that "normal wages" underlie them all, and that any variations from this level are but the result of economic monopoly, temporary or durable, in which other laborers do not share.

It is, however, worth noticing how far the wages class extends. For economic purposes, the share of product (abstraction being made of all "rent of ability" or other monopoly gains) which remunerates the "efforts and sacrifices" of all persons who actually co-operate in production, must be, in the theory of distribution, called wages. The separation from one another of the several grades of workers has, here as elsewhere, tended to obscure the uniformity in character of all the productive classes, which was dwelt upon by Jevons. "Masters" have been in the habit of receiving not "wages" alone, but "profits," which, besides "rent of ability," include interest and often land rent. "Men," on the other hand, often receive much "rent of ability" with their "economic wages." Inventors usually receive not wages, but payments for royalties and licenses. Accumulators of social capital generally obtain as such no more for their services than absolutely idle inheritors; that is, interest forever on the capital belonging to them. But we must not be misled by this confusion of names or characters. The services of all those

who personally assist the production of utility form — as Jevons pointed out — economically one great class, as opposed to those who do not contribute to social production. The best terms for the remuneration of these services appear to be “rent of ability” and “economic wages,” since the other persons must live on tribute of some kind, usually, in fact, upon economic rent or interest.

This conception of society is assisted by the development of modern industry. Managers tend more and more to be paid by salary in some vast concern, instead of personally taking the “profits” of a small one. Such industrial leviathans now employ their own inventors, at regular wages, to invent and design for them. If these industrial monsters do not yet engage persons at weekly wages to accumulate capital for them, it is because their command of surplus value makes abstention from immediate consumption an easy task, not worth escaping by any such “vicarious atonement.”

With these explanations, we may now leave the share of the aggregate social produce to be known as “economic wages.” It may be summarily defined as the amount of produce produced by the worker at the margin of cultivation with the minimum capital and skill, multiplied by the number of persons actually assisting in social production of utility in any form, whatever the social rank or grade.

But it is in the classification of the remainder of the aggregate produce that the interest of the problem chiefly lies. That there is any product over and above “economic wages,” as above defined, is obviously due to the fact that man labors with varying degrees of efficiency. On the “margin of cultivation,” without skill or capital, the whole of the product is “economic wages.” Any larger product obtained elsewhere by an equivalent amount of labor must be the result of the employment of more advantageous land, of more effective labor, or of

capital. According as it can be ascribed to one or the other of these causes, "surplus value" must be allotted to land rent, to the so-called "rent of ability," or to what is, in an economic sense, interest, however widely it may differ from the actual payment for the hire of capital in the market at any particular moment.

Now, as regards the extra produce over that at the margin of cultivation, which is due to greater advantages of site, there is no difficulty. President Walker has himself well demonstrated how all the various differences fall under the head of "economic rent." He will be prepared to include in this term all advantages permanently fixed to any "immovable," and doubtless also to extend it to those derived from unchangeable and durable forms of capital, such as ships and some heavy machinery.

We are also enabled to put aside the extra produce due to the superior skill or ability of the worker, over and above the commonest unskilled laborer. President Walker has shown how this extra produce, due to the superior ability of the mechanic, foreman, manager, doctor, or statesman, is a real economic rent, to be called "rent of ability."*

But there is still variation in the product of equal labor under different circumstances, even after allowing for the economic rent of "land" and "ability." In our complex modern industry, we cultivate other things as well as land, and know how to create value at several removes from the mother earth. The use of capital enables the worker to produce more than he otherwise could, in a degree varying with the particular industry and with the circum-

*It may, however, be submitted for perfect accuracy that it is only "within the limits of the same trade or profession," or at most within competing groups, that the normal remuneration is exactly proportionate to the relative ability as compared with that of the worst worker. As between workers in what Cairnes called "non-competing groups," the remuneration "of the worst worker in each will vary in proportion to the relative final utility" of those kinds of labor,—a conclusion not differing in result from Cairnes's "Law of Reciprocal Demand," but not exactly in accordance with the pure "rent of ability" doctrine.

stances of industrial development. This surplus is not land rent or "rent of ability," for we have already eliminated all resulting from these factors. It is not wages so long as the worker in the worst circumstances is unsupplied with capital equally advantageous, for his scanty product determines "economic wages" all over the community. Surely, the best name for this extra produce, resulting from the use of capital and the enjoyment of special industrial advantages not due to superiority of site or skill, will be simply "economic interest."

We are now in a position to set forth the independent definition of "economic interest," which is necessary to complete the theory of distribution. "Economic interest" is the amount of produce over and above "economic wages" which is obtained through the use of capital, upon land at the margin of cultivation by the skill of the worst worker employed in the industrial community, or upon better land with greater skill, after deduction of the economic rent of the land and ability. This obviously exhausts the whole product; and this, not the "rent of ability," is the real keystone of the arch.

It is submitted that it is this "economic interest," and not the ordinary payment for loan capital, which must be considered as a constituent element in "profits." Business profits would equally exist in a community where borrowing was unknown. Unless President Walker is prepared to say that in such a community these "profits" would exclusively consist of "rent of ability," he must admit that their amount could not in that case be affected by the "rate of interest" in the popular sense; for no such phenomenon would be known.

It is true that the amount of "economic interest" to be obtained from a given quantity (not value) of capital is an important motive for the accumulation of that capital, and that it is possible that accumulation may diminish where the result of the use of capital falls off. But,

unless it can be proved that this is the only motive for accumulation (which it is not), it is clear that it cannot be assumed that the supply of capital is automatically regulated by the return to be obtained from its use, let alone by the current "rate of interest" on the currency valuation of it.

The definition of "economic interest" here attempted enables another gap to be filled in the determination of "profits," which economists are prone to overlook. Profits actually depend, not only on skill and on the amount of capital employed, but largely also upon opportunity and chance. The constantly changing conditions of the industrial community make the economic position of every member of it to vary from day to day. Mere priority and proximity are constantly found to be as effective guards of *temporary* monopoly as a patent or a favorable site. The profits of business depend largely upon seizing those frequently recurring separate advantages; and, though this may be claimed as an element of business ability, it is so much a matter of chance that many of these "wind-falls" must be put down as adventitious advantages of the possession of capital, in a certain form, at a particular point of time and space. This "rent of opportunity" forms a considerable part of "economic interest."

"Economic interest," as here defined, is expressed by a law similar to the Ricardian law of rent. It varies according to the advantage of the particular capital over that minimum capital employed by the worker at the margin of cultivation. That capital yields theoretically no "economic interest," since its amount is so small that it is but the equivalent of capital, the use of which is supplied elsewhere gratuitously to all workers by the community. It may however be objected that the "law of rent" depends also upon the existence of the "law of diminishing return which has been supposed not to apply to manufacturing industries. I venture to think that this suppo-

sition is erroneous. Capital has its "law of diminishing return," as much as land. The man of business making good profits naturally tries to take the fullest possible advantage of his advantageous opportunity, and borrows loan capital to increase his business. But he, like the farmer with his land, finds that, after a certain not invariable point, an addition of capital ceases to enable the labor employed to obtain a proportionately increased return. Up to that point, the increased economy in production is not counterbalanced by disadvantages; and the undertaking increases. This is equally true of agriculture, as the farmer with insufficient capital finds to his cost. But, when the point is reached, the counterbalancing disadvantages begin to exceed the increased efficiency. It is irresistibly argued that, if this were not true of agriculture, we should raise all our corn in the one most fertile valley. It may equally be urged that, if it were not true of manufactures, we should spin all our cotton in the one most favorably situated gigantic mill. If it were not equally true of distributive industry, one huge shop would supply a city. There is a certain limit to the business which any one industrial concern can carry on to greater advantage than its neighbors. Beyond that point, although a still further increase would offer further economies in establishment charges and the like, it cannot apparently be obtained on remunerative terms. It is not want of capital, or inability to effect greater economies, that prevents Mr. Whiteley from supplying all London. He may probably have reached his point of maximum economic "cultivation," and, though still maintaining his old superiorities, is unable to supply any larger circle of customers to greater advantage than his surviving competitors. The "economic advantage" of a plot of land, or a ship, or a factory, is subject to narrower limits than those set by its greatest possible productivity. Considerations of distance, of local specialities, of difference in taste, and the per-

sonal element, all combine in preventing the "one-man power" in production. God takes care, the child Goethe was informed, that the trees shall not grow up into the sky; and there is still economic use for those of our factories, hands and brains, as well as of our lands, which are not equal to the best in their respective departments. Those who are most favored will produce the greatest utility, but even the best of all will find a limit beyond which the humblest may successfully compete with him. Beyond this point, the "law of diminishing return" becomes effective; and though, for instance, there are in London printing establishments varying in magnitude from the proprietor of a hundred machines down to the jobbing compositor with his hand-press, the actual "cost of production" of the last piece of work performed by each clearly tends constantly to a close equality, for the various businesses continue to compete with each other.

It is in this way that capitalist competes with capitalist. The statement is true that, abstraction made of land and ability rent, "profits"—that is, the return to capital—"tend to equality"; but it is equality only of the return to the last increment of capital employed in each case. The possessor of a prosperous mine or business does not go on increasing it beyond the economic "margin of cultivation" merely because, on an average of the whole capital employed, he could still earn the market rate of interest. He will not borrow to extend his operations unless the extension itself will yield more than the interest on the new capital employed therein. He, like the tiller of the soil, stops at the point where further profit would be a relative loss; and he thus maintains safely the "economic interest" of the more advantageous earlier undertakings.

We thus see that the aggregate gains of business men, like the incomes of landlords or men of genius, in no way tend to equality either of rate or of amount. They often

consist in part of the economic rent of land. They are made up to a still greater degree of the economic rent of ability; and they are completed by "economic interest," varying according to each man's opportunity and to the amount (not value) of capital his business can effectively employ. There is no "tendency to equality" in any of these items, and they vary without reference to each other. There is accordingly no tendency to equality in their aggregates. The amount (and also the proportion of surplus value to wages) varies in each case.

The element of truth in the "tendency of profits to equality" lies in the two facts, that loan capitals, by the "law of indifference," will realize equal loan interests when the circumstances as to risk and other conditions are equal; and that in a state of economic equilibrium the returns to the last increments of capital, wherever applied, will be equal. It may be shown that these two statements are equivalent, and the determination of the rate of interest will then be complete.

We have seen that the capital of an industrial community in economic equilibrium is so distributed that the last increment of it will result in a return less than the return to any of the earlier increments. The amount of that last return will depend upon the facts of each community,—upon the relative position of the "margin of cultivation" of land, capital, and ability respectively. When capital is relatively scarce, so that even the last increment is applied upon fertile land and with considerable ability, the return will be great (and land rent and rent of ability will be small). As capital increases, and the "margin of cultivation" for its employment retreats, the return to the last increment will be less (and land rent or rent of ability, or both, will be greater). It may be added that "economic wages," dependent as they are upon the return to labor at the absolute contemporary "margin of cultivation," may vary independently of "economic interest," though not of economic land rent. The

amount of capital relatively to the amount of fertile land and ability may remain stationary, while the population is increasing. In this case, "economic interest" would be stationary, while all the other shares of the product were varying.

Now, the return to the last increment of capital is the most that a lender of capital can normally obtain for its use. The borrower intends to add the borrowed capital to that which he already employs. It then becomes itself the last increment; and its return, by hypothesis not exceeding the return to the former last increment, is the measure of the maximum loan interest that the borrower will pay. At a loan interest a shade less in amount, it will pay him to extend his business; and he will borrow. At a shade more, he will prefer to stand on the old lines. The normal amount of loan interest will therefore be the return to the last increment of capital within the community; and, by the law of "indifference," this will tend to equality throughout the community. If this return induces an increase of capital, the effect upon "loan interest" depends upon the facts of the community. If all the additional capital can be employed so as to produce a return only fractionally less than the return to the previous "last increment," the normal loan interest will fall only to that small extent, however much the increase of capital may be. If it produces more (*e.g.*, by a simultaneous increase of ability or improved fertility), the normal loan interest will rise, in spite of the increase of capital. These tendencies usually coexist, and the normal loan interest is the resultant.

We have hitherto spoken of the amount of interest, and not the rate. The return to capital is not currency, but commodities. The valuation of the capital, and the valuation of the commodities obtained by its use, is an entirely different and subsidiary problem, not affecting the principles of distribution. The American railways do not produce more utility because their stock is "watered":

the amount of capital and the return to that capital remain unaffected by even the most ingenious of book-keeping transactions. The real inducement to save the amount of capital called £100 is not a nominal rate per cent., but (among other objects) the amount of commodities to be obtained by its use; and this depends in no way upon the number of pieces of metal or paper at which the capital and the interest may be assessed.

If these views be correct, the principles upon which the economic classification of the produce must be determined are complete and mutually consistent. The amount of produce obtained by the labor of the man at the margin of cultivation, with the minimum capital and ability, sets the standard of normal wages throughout the community. The excess produced owing to the greater advantages of better land is economic rent of land. The excess produced owing to the employment of more skilled workers is rent of ability. The excess produced owing to the employment of capital (including the occasional gains due to temporary monopoly or other commercial advantage) should be called "economic interest." The three latter elements all follow the "law of diminishing return," and depend upon the position of the "margin of cultivation" of land, ability, and capital respectively; and this position results from the economic facts of the particular community at any given time.

If this theory be correct, it is evident that along with "profits tend to equality" must go several other cherished principles of the orthodox economics in the fields of taxation, wages, and profits. Those economists who are land nationalizers may find themselves drawn closer to their socialist colleagues. The influence of the progress of industrial organization on profits and wages will need serious reconsideration. But all these matters must be left to abler and more leisured investigators.

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NOTES AND MEMORANDA.

THE article by President Walker, on the "Theory of Business Profits," printed in the third number of this *Journal* for last year, has called forth the criticism and discussion which its author expected, and indeed invited, and has proved to be a valuable stimulus to the fresh examination of some of the fundamentals of economic theory.

President Walker's reply upon some of the points brought forward in the debate we are obliged to postpone for publication in our April number.

WE understand that the result of the well-known labors of Mr. W. M. Grosvenor on prices will be the production of two volumes, one covering the comparison of prices from January, 1860, to the present time, and the other reviewing, as far as practicable, the course of prices before 1860. Of these volumes, the first is well advanced, and it is hoped may be brought out in the course of the coming summer. The publication will be looked for with great interest; for, besides the fact that the student has to content himself with unsatisfactory material in investigations involving a comparison of American prices, it is well known that Mr. Grosvenor regards the ordinary method of comparison as fatally defective, and that he attempts to apply one of his own, resting upon scientific considerations of no small importance.

THE death of Dr. Wiss, late editor of the *Vierteljahrschrift für Volkswirtschaft* of Berlin, has led to an arrangement under which Dr. Karl Braun now appears as editor of the periodical, which has so long represented the old school in German economics.

IT is announced that the sixth series of Johns Hopkins University Studies in History and Political Science will consist of

a valuable collection of papers on Co-operation in the United States, prepared under the care of Dr. Ely. Of these papers, several, by Drs. Bemis, Shaw, and Warner, have already appeared in the publications of the American Economic Association; and the entire collection, covering the United States, and bringing together the results of careful research, will present an important mass of facts in the history of co-operation in this country, of which no student can fail to appreciate the high value.

MR. EDWARD ATKINSON's report on the prospects of bimetallic legislation in Europe, which has been submitted to the Senate by the State Department, hardly makes a positive contribution to our knowledge of the situation. Still, it will doubtless be of service in making more clear the practical impossibility of an international agreement for the coinage of silver. Mr. Atkinson lays special stress on the fact that at present the difference between our ratio and that of the countries of the Latin Union is an insuperable obstacle in the way of such an agreement. It is interesting to note also that he believes that the demand for silver at its present price is fully up to the supply, and that, without further legislation, its price is likely to rise rather than fall.

Students of economics will be indebted to Mr. Atkinson for the valuable appendices which he has caused to be added to his report. These will contain the paper by Professor Greven on the monetary experience of Holland, which was printed in the last issue of this *Journal*; several statements from geologists as to the probable future production of gold and silver; and, not least important, a translation of the second edition of Professor Soetbeer's *Materialien* on the silver question. This great collection of materials—the fruit of great skill and extraordinary diligence—will now be accessible in convenient form. Mr. Atkinson's report will be printed as a Senate Executive Document, and therefore will be obtainable through senators. It will also be printed as one number of the Consular Reports, which are issued by the Bureau of Statistics of the State Department, and in this form will be

distributed by Mr. Worthington C. Ford, the chief of the Bureau.*

THE Secretary of the Treasury, calling the attention of Congress, in his Finance Report, to the difficulty and perhaps impossibility of continuing to invest the whole of the surplus in purchases of government bonds, makes some remarks on the sinking fund, which have a less firm tone than that which characterizes his report generally:—

I am not, however, at present disposed to recommend the repeal of the sinking-fund requirements of the present laws. It is probable that the command of these laws can only be obeyed at heavy cost; but, nevertheless, it is better and more wholesome that the country should each year continue to devote such sum as they require to the extinguishment of as much of the interest-bearing debt as can be purchased therewith. At least, the experiment should be faithfully tried until it is demonstrated to be a failure.

As the sinking-fund requirements, established by the act of February 25, 1862, have uniformly been regarded as part of a contract with the public creditors, and never as an experiment or a method to be practised or discontinued at the pleasure of the government, it is to be hoped that no secretary will ever feel "disposed to recommend their repeal." They are to be maintained, even at heavy cost, not only because they are wholesome, but as a matter of public faith. The public credit no longer needs the support which a sinking fund was supposed likely to give it, but the time never comes when a nation can afford to make a precedent by allowing in its own finances what it would not allow in those of a corporation under its control.

IN the closing number of the *Tübingen Zeitschrift* for 1887, Professor Adolph Wagner, in a second article on "Finanzwissenschaft und Staatssozialismus," having occasion to notice Léon Say's *Le Socialisme d'État* takes the opportunity to cor-

*A limited number of copies of the report are to be at the disposal of F. W. Taussig, Cambridge, Mass., who will be glad to send them to teachers and students of economic subjects. Applications should be accompanied by postage stamps for fifteen cents.

rect an observation made by Say respecting Wagner's relations to Prince Bismarck. The correction in Wagner's opinion, although not necessary for German readers, may have some interest for others:—

Say calls me the "theorizer" of the Bismarckian solution of the social question by means of compulsory insurance; and, elsewhere, I am styled the very *spiritus rector* of the Imperial Chancellor in this field. The Imperial Chancellor needs nothing of the sort, and is well known as a man not specially accessible to the theoretical views of others, although he has a good share of the "German" "*doctrinaire vein*," and of the tendency to generalization,—as is shown, for example, by his imperfect theory that the import duties are, in brief, borne by foreigners. At all events, I have personally not had the honor of being Bismarck's "theorizer," and have done nothing to cause such an incorrect idea to be entertained by anybody. In his "theoretical idea," which I hold to be the Chancellor's best and greatest, of devoting the profits of a tobacco monopoly as a *patrimonium pauperum*,—a "patrimony of the disinherited,"—for the support of workingmen's insurance, it was the powerful practical man from whom I, the theorist, received and learned something. In this matter, then, there was *not* the reverse relation between us, as has been falsely represented; for this "idea," so far as I know, sprang solely from the Imperial Chancellor, from whom I at least first received it. I had only discussed some related ideas of expending the product of indirect taxes on consumption, such as bear especially upon the lower classes by action on prices, for public purposes of special benefit for these classes.

THE *Bulletin de Statistique* for November contains the text of the measures by which the French government has just effected the so-called conversion of about 826,000,000 francs of $4\frac{1}{2}$ per cents. and 11,000,000 of 4s into 3 per cents. The operation, which included a disguised loan, was as follows:—

The holder was offered either reimbursement at par, or the exchange of his securities for an equivalent capital in 3s allotted to him at 80. If he chose the latter alternative, he could also subscribe for enough 3s at 81.1 to bring up his income to its old amount. Thus, the holder of 10,000 francs nominal capital in the $4\frac{1}{2}$ per cents., producing an income of 450 francs, had the right to 10,000 francs in 3s at 80, making a nominal capital of 12,500 and yielding 375 francs per annum, and could also subscribe for 2,500 in 3s at 81.1, yielding 75

frances per annum, and making his total income 450 as before. The rates fixed for the 3s were low enough to bring in for exchange nine-tenths of the $4\frac{1}{2}$ per cents. and 4s.

This operation, of which the exact results are not yet at hand, did not alter the annual interest charge of the debt, but carried up a nominal capital of about 840,000,000 francs to the neighborhood of 1,250,000,000 francs, and destroys the possibility *pro tanto* of any real conversion in the future. The inducement for this sacrifice was the 210,000,000 or so in ready cash, paid in for new 3 per cents. The precedents for this improvident transaction are the similar operation by M. Fould in 1862, and the exchange of the Morgan loan in 1875. See Labeyrie, *Conversion de Rentes*, 414, 451.

POLITICAL ECONOMY, OLD AND NEW.

[Professor Edward Caird, of Glasgow, in a lecture given in London, October 9, 1887, summed up the debate between the old school in political economy and the new, in the following striking passage, for which our readers are indebted to a friend who was able to transcribe it from Professor Caird's manuscript:—]

Of late years, the old political economy has been much criticised; and there has been a disposition to follow some eminent authorities in relegating it to Jupiter or Saturn. Moreover, the old school has been attacked by two new schools, the historical and the socialist or semi-socialist schools of political economy, who have brought a formidable battery of criticism to bear upon its defects. Poor Adam Smith has had the hard fate of having his doctrines set up to be attacked in Germany under the awful name of *Smithianismus*. Now, I do not deny that there is a good deal of truth in some of the objections brought by such writers, or that the old economists often stated absolutely doctrines which require to be accepted with many limitations. I admit that they had not, as no one before this century ever had, a sufficient grasp of the great idea of development. Hence, they took man as a being who had always been exactly what he had come in the eighteenth century to be; nor did they see how much he had changed and was changing under new conditions. Finally, they were pos-

essed too exclusively by the individualistic tendency; they were full of the idea of individual liberty, and thought comparatively little of social unity. At the same time, their work was genuine so far as it went: it produced results which will be undervalued only by those who do not understand them,—results which may require modification, but which no economical student can ever neglect with impunity. Those who permit themselves to be carried away by the prevailing tendencies of the present time, and do not thoroughly study the old economical work, as well as the best modern interpreters of it, will never do much good in building up the economy of the future. They will simply be parts of that mob which is always carried away, at every time, by the popular abstraction, and which cries out to-day for social unity, as a century ago it cried out for individual liberty. *Non tali auxilio nec defensoribus istis*: it is not out of such stuff that those are made who will act and write not as blind partisans, but so as to cast a new reconciling light upon the confused conflict of social forces. Speaking to students of economy, I think I am giving the most valuable of counsels when I tell them not to think that they will increase the illumination by selling their old lamps for new, but to remember that he who would make permanent additions to the stock of human knowledge must thoroughly know what has been done already. For the future belongs to those who thoroughly appreciate the achievements of the past.

On the other hand, this being granted, it is equally true that the economical work of the great writers of the last generation cannot, any more than their ethical work, be regarded as final. Partly, as I have said, their method was too abstract; partly, also, the conditions of our social organization are changed. The very gigantic scale of modern industry brings with it something socialistic, or it gives rise at least to necessity for social control, which was not felt so much when commercial enterprise was confined. What is perhaps still more important, the sense of social responsibility has been growing in a way which makes it impossible to isolate the economical problem from the ethical, as the tendency formerly was to isolate it. I do not think it will be possible henceforth to separate

political economy from the general study of politics, or to discuss the laws of the production and distribution of wealth apart from the consideration of the relation of the distribution of wealth, and the modes of distributing it, to other elements of social well-being. The abstraction of science will always be necessary for thorough knowledge of economy, as of everything else; but, when we isolate parts of human existence, it is more important than in relation to any other subject to remember that we *are* abstracting, and that we are dealing with fragments of a whole, of which no final account can be given by anatomy. The practical value of the social science of the future will depend not only on the way in which we break up the complex problem of our existence into manageable parts, but as much, and even more, upon the way in which we are able to gather the elements together again, to see how they act and react upon each other in the living movement of the social body.

EXTENSION OF GERMAN INSURANCE LEGISLATION.

In the last issue of this *Journal* (p. 133), reference was made to a bill in course of preparation in Germany, by which the system of compulsory insurance was to be extended so as to provide pensions in case of old age or disability. At present, provision is made only for the contingencies of accident and sickness; but it has been the intention from the outset to care also for the laborer when permanently disabled or enfeebled by old age. An important step towards this completion of the system has been taken by the preparation of a careful bill, published in the *Norddeutsche Allgemeine Zeitung*, and likely soon to be submitted to the Reichstag.

The new bill proposes to make use of the *Berufs-genossenschaften*, or employers' associations, which are established already for the purpose of carrying and administering insurance against accident, and to call on them to manage the new pension system. Their pension account, of course, is to be kept separate from the accident account; but there is an obvious saving of expense by utilizing the existing machinery. As in the acts for insurance against sickness and accident, all hired

"laborers, assistants, journeymen, apprentices, and servants" are to be insured; and the line at which persons are supposed to be likely or able to provide for their own future is again drawn at administrative officers earning 2,000 marks per year or more. The means for paying the pensions, however, are secured in a manner somewhat different from that of the existing acts. For accident insurance, it will be remembered the employers now contribute the whole amount. For sick insurance, they pay one-third, while two-thirds are deducted from wages. For pensions, it is proposed that the employers shall pay one-third, another third is to be deducted from wages, the last third is borne by the imperial treasury. But the empire bears no share of the running expenses; it pays simply one-third of the total pension payments accruing each year. The pensions are to be 120 marks (\$30) per year in case of old age, and in case of disability are to vary from 120 marks to 250 marks (from \$30 to \$62.50), the sum varying according to the length of time for which contributions have been paid on account of the individual workman. It is, of course, impossible to know in advance what premiums will be necessary to yield these payments, and a permanent scale of contributions is not fixed in the bill, but is to be determined by the Imperial Insurance Bureau within ten years after the act goes into operation. Until such a final scale is arranged, the payments by the employers are to be 4 pfennigs per day, half on their own account, half on the workmen's account. Adding 2 pfennigs from the empire, we get a total premium of 6 pfennigs per day, or 36 marks per working year of three hundred days. In the bill, as it lies before us, it is not clear when its provisions (should it become law) are to go into effect. It is made a condition for getting a pension for old age, which begins with the seventy-first year, that contributions must have been paid during thirty years preceding; and, similarly, payments during at least five years are required for the pension in case of disability. Apparently, no arrangements are made to bridge over the period before these provisions can go into effect.

No doubt, changes will be made in details; but it is more than likely that in its main features this bill will become law.

When this is done, the last step in this remarkable series of measures will have been taken. The German workman will then be provided, partly by deductions from his stipulated wages and partly by payments from his employer and from the state,—which probably will not be without their effect on his wages,—against sickness, accident and death from accident, and incapacity from old age or other cause. He will have no provision, however, in one serious contingency, that of lack of employment. A laborer who is out of work has no claim to indemnity for accident. He can retain his claim for indemnity in case of sickness only if he continues himself to pay his insurance contributions.* His rights under the pension bill just described are again limited by the time when he is at work and when contributions continue to be paid on his account. For instance, he is obliged to wait thirty years before a right to pension for old age accrues. These thirty years, however, are not calendar years, but years of contribution. Three hundred days for which contributions are paid count as a year. If he is sick, it is true the time still counts for him under the proposed bill, even though no contributions be paid; but if he is out of work, the time is lost. In fact, the alleviation of distress resulting from a laborer's failing to work is left to the ordinary machinery of the poor law. Obviously, one great cause of misery and discontent thereby remains as it was, unaffected by the new legislation. Changes in the poor laws are, it is true, under consideration, and it remains to be seen what may be done in this direction. But unless a considerable departure is made from sound principles in reshaping the poor laws, the insurance legislation is likely to fail in attaining one object, which undoubtedly is prominent in the minds of its framers,—the check to the successful propaganda of the socialists.

On the other hand, it is not easy to see how any other course is open to the German legislators. A guarantee of support and aid, sufficient in amount and not disagreeable in kind, cannot be held out safely to the average laborer for the case of his being out of work. It could result only in shiftlessness and demoralized character. The Malthusian objection would be unanswerable. A writer in a recent issue of the

* See § 11 of the Sick Insurance Act, vol. ii. p. 115, of this *Journal*.

*Jahrbuch für Gesetzgebung** has laid it down that the insurance legislation on its present lines is not inconsistent with the principle of self-help or with the maintenance of sound character, for the very reason that it gives no guarantee of work, or of aid in case there is no work. Whether or not this be true of the legislation so far as it has yet gone, it certainly points out the limits beyond which this or any benevolent legislation cannot go with safety.

WAGES AND PROFITS.

Readers of this review will perhaps expect me to say something in answer to Mr. Macvane's criticisms, in the last number, on the doctrine of Distribution contained in the *Economics of Industry*. I have come across most of his objections before, but never, I think, so ably and coherently stated; and I therefore desire to treat them with all respect. They cover, however, so wide a ground that a full answer here is out of the question. I propose, therefore, to select what seem to me his two most striking points, and submit my own views with regard to them briefly, and without staying to indicate the respects in which they seem to me to differ from those of General Walker.

I regard the wages fund doctrine not as false, but as pretentious and misleading. As explained by careless writers, it is, I think, false. As explained by Cairnes and others, it is so far explained away that there is very little left in it to justify its title, and nothing at all which cannot be expressed better in other ways. Its form is objectionable, because, while not calling attention to the real differences which there are between markets for labor and markets for goods, it implies differences which do not exist; and, after all, it is but a fragment, isolated, discontinuous with the rest of economics, and a hindrance to a scientific conception of the whole subject.

The theory of Normal Wages given in the *Economics of Industry* is not in contradiction to the wages-fund doctrine as explained by Cairnes, but claims to expand and develop that doctrine, and to fit it into its proper place in the whole

* Dr. H. Thiel, in *Jahrg.* 11, Heft 2, pp. 69-73.

body of economic theory. But Cairnes himself could not get free from the misleading associations of that unfortunate phrase. In one case only does he attempt to apply his doctrine so carefully explained to a practical problem. That one case relates not to Normal Wages, but to Market Wages; and on that we join issue.

He argues (*Leading Principles*, pp. 203, 204) that if there is an increase of labor not accompanied by an increase of capital, and if the labor is of such a kind as to be employed in conjunction with fixed capital and raw material, some of the capital in the island will be diverted to this purpose, that therefore the wages fund will "contract as the supply of labor expands." In opposition to this, it is argued in the *Economics of Industry* (p. 205) that the new labor will instantly "increase the net produce of capital and labor, and therefore the Wages-and-profits Fund. It is true that employers will compete less keenly than before for the hire of labor, partly because there is more labor to be hired, and partly because it will answer their purpose to divert some of their means from hiring laborers to providing more auxiliary capital; and therefore the rate of wages will fall. But it is not certain, nor even very probable, that the whole share which labor gets of the Wages-and-profits Fund will amount to less than before." Mr. Macvane, as I understand, takes this as the crucial point of difference between us. He says (p. 27, note): "There can be no question that this result will follow in the course of time. But will it—as a matter of physical possibility, *can* it—happen at once? Must not the increase begin at the beginning of production?"

I answer: It can happen at once. The moment the laborer is set to work, more partly finished processes of production are finished than would otherwise have been the case, more processes just begun are carried a little further, more new processes are begun. Though the spinner cannot get as his wages to-day the carpet that will be made of the yarn which he spins to-day, there are pretty sure to be enough carpets in store to meet the increased demand due to the increased aggregate of wages, which in my belief there would be; and manufacturers and dealers, knowing that larger supplies than

before are being made, will not hesitate to sell freely from their stocks. Of course, it is true that a sudden and unexpected increase of labor in a place which had no means of importing corn might cause a temporary scarcity of food. But Cairnes, of course, does not assume the increase to take this catastrophic form; and, indeed if he did, what he says about fixed capital would be irrelevant, for in this extreme case there would be a temporary scarcity of food, whether much fixed capital were used or not. His argument shows that he regards the increase of labor as gradual, so that there is time for producers to divert their energies from the production of wage-capital to that of auxiliary capital.

I admit, however, that "the Wages-and-profits *Fund*" is not a good term. I adopted it as a catch-word, to indicate my opinion that wages and profits have their *normal* values determined by causes of the same general character. For that purpose, I retained the latter half of the old term wages-fund. But really what is meant is not a fund of stored up wealth sufficient to afford wages and profits for a fixed period, say a year: it is rather a flow of income to be distributed.

To avoid misapprehension, I should perhaps say that I do not speak of wages as "paid out of the products of industry," in a sense in which this may be understood to mean that labor is not supported by capital. On this point I seem to be in entire agreement with Mr. Macvane. The bargain between labor and capital is doubtless that the wage-receiver gets command over commodities in a form ready for immediate consumption, and in exchange carries his employer's goods a stage further towards being ready for immediate consumption. But, while this is true of most employees, those who finish the processes—*e.g.*, those who put together and finish watches—give to their employers far more commodities in a form ready for immediate consumption than they take from them; and thus the balance is redressed. Taking one season of the year with another, so as to allow for seed and harvest time, workmen as a whole hand over to their employers more finished commodities than they receive as wages. But—to say nothing of machinery and factories, of ships and railroads—the houses loaned to workmen, and even the raw materials in various

stages which will be worked up into commodities consumed by them, represent a far greater advance of capital to them than the equivalent of the advances which they make to the capitalist, even when they work for a month for him before getting any wages.

The other remark of Mr. Macvane to which I desire to reply is one the force of which I think I must have failed to catch; for, if I have understood him rightly, our difference is here a very real one. He says (p. 9): "If a good manager can create as much wealth as one hundred men when good managers are few, he can do the same when good managers are numerous. If his earnings are to be the addition his work makes to the produce of capital and labor, how can mere increase of the number of men capable of thus adding to the produce of capital and labor diminish his earnings? Mr. Marshall, in accounting for the decline, cites as analogous the decline in the wages of skilled labor as the number possessing the skill increases. But there is this fundamental difference between the two cases, which renders analogy between them impossible for the purpose in hand. Skilled labor has specific products of its own, which fall in value as the supply of them is increased. But management has no distinct products of its own. All production needs management, and all products cannot fall in value." Can Mr. Macvane mean that every increase in the output of a business must cause a proportionate increase in its exchange value? His words seem to imply this, but I prefer to suppose that I have misunderstood him. So I will merely restate my own position.

It is well known that great economies have been introduced into many branches of iron manufacture by diminishing the number of times which the metal is heated in passing from pig iron to its final form. Suppose an iron manufacturer with a capital of £50,000 to be getting in normal times a net profit of £4,000 a year, £1,500 of which we may regard as his earnings of management. We assume that so far he has been working in the same way as his neighbors, and showing an amount of ability which, though great, is no more than the normal or average ability of the people who fill such excep-

tionally difficult posts. That is, we assume that £1,500 a year is the normal earnings for the kind of work he has been doing. But, as time goes on, he thinks out a way of dispensing with one of the heatings that have hitherto been customary; and in consequence, without increasing his expenses, he is able to increase his annual output by things which can be sold for £2,000 net. And, so long as he can sell his wares at the old price, his earnings of management will be £2,000 a year above the average. His neighbors, however, will copy his plan; and perhaps, for a while, they will all make more than average profits. But before long competition will increase the supply and lower the price of their wares, until the profits of the business are such as to give only normal earnings of management as before; for no one could get extra high wages for making eggs stand on their ends after Columbus's plan had become public property. As soon as any plan of manufacturing is so far reduced to routine that it no longer requires exceptional ability, those who follow the method add much less to the efficiency of production than they would have done if they had had to think out the method themselves. The production is as great as it would have been; but more of it is due to knowledge which is the common property of the world, and less of it is due to the comparatively commonplace men who are able to follow in the now well-beaten track. Putting aside the gains of speculation, which require to some extent a separate treatment, it remains true that competition tends to secure to each ordinary employer earnings of management equal to what his work adds to the efficiency of production, so much and no more. Inventors and pioneers are seldom able to retain for many years, even if they ever get it, the full value of the addition they make to the efficiency of production. It must, however, be admitted that occasionally a man will complete improvements which others have nearly worked out, and by patenting the last little link which he has added, get more than his deserts.

As to the question what part of his profits should be called rent, I wish to say that I do not attach great importance to this method of speaking in spite of the great support which it has from the traditions of Senior and of many foreign econ-

omists from the time of Storch and Mangoldt (see, for instance, Mataja's *Unternehmergewinn* chap. i., § c.). I regard it only as an analogy, and, moreover, as one which, if pressed too far, is likely to be misleading. In particular, it is difficult to know how much the success of any business man is to be ascribed to his good fortune in getting on work suited to him, and ought therefore to be balanced against the failures of others, who turn out to have selected a wrong occupation for their faculties. When a fisherman makes a good haul, we do not count it as rent: we set it off against the bad haul, and expect him to get in the long run earnings for his labor and interest on his capital, but nothing more; but this brings us to the fringe of a difficult set of problems, which could not be adequately discussed here.

ALFRED MARSHALL.

OCCUPATIONS OF IMMIGRANTS.

Immigration has lately become a staple topic of discussion. The possible necessity of its restriction has been mentioned in public addresses by Senator Cullom and Mr. Chauncey M. Depew. Not long ago, a number of *Public Opinion* contained nearly four pages of extracts from articles on this subject, published in thirty-eight newspapers. The Ohio Republican platform even contains a suggestion of restriction. "We view with alarm," says the platform, in the tritest of all trite political phraseology, "unrestricted emigration from foreign lands." Congress is urged "to pass such laws and establish such regulations as shall protect us from the inroad of the anarchist, the communist, the polygamist, fugitives from justice, the insane, the dependent pauper, the vicious and criminal classes, contract labor in every form, under any name or guise."

The State Department has published a bulky volume of consular reports on immigration, embodying an abridgment of statistics of the occupations of immigrants, taken from the annual reports of the Bureau of Statistics. This bears on the most interesting branch of the general subject. Little information about immigration beyond the number of arrivals reaches the public. Occasionally, attention is called to the

numbers from particular countries, and sometimes an article is published containing estimates of the amount of property brought into the country by immigrants or the economic value of immigrants to the country; but the official reports are seldom searched for anything else. The State Department document referred to does present some figures showing the numbers of skilled and unskilled immigrants; but these of themselves tell little, because it is a question what occupations are skilled. In the reports of the Bureau of Statistics, clerks appear as skilled; while merchants and dealers belong to the miscellaneous category. The State Department tables of occupation are not so full as those published by the Bureau of Statistics, and do not show how few persons belonging to certain leading occupations come to this country.

When the present tariff was under debate in the Senate, there was, of course, a great deal said about the superior condition of working people in this country, and about rates of wages and costs of living; and finally a New England senator brought forward the argument for his side in the following shape:—

There are thousands and thousands of operatives in cotton factories in this country. They are, and are becoming, American citizens. They have come from English cotton factories to ours, and they never go back. Now, no matter who makes tables of statistics, these men know what they have left and what they have come to. They have left their parents and brothers and sisters behind them, and they communicate with them; and they know by a very terrible practical experience what it is to be operatives in English factories, and they have travelled by land and sea to come to ours.

There can be no question about the good faith of the speaker. He believed that the great cotton mills of his own and the neighboring States were filled with operatives who had learned their trades in England or on the continent, and had fled from the starvation wages of the Old World to the peace and plenty of the New; and the same thing was believed on the opposite side of the chamber.

The ten years from 1877 to 1886 inclusive were years of large and small immigration. They were years of prosperity and depression both here and abroad. The period is sufficient

to give value to an analysis of its immigration statistics. In these years, 4,255,295 immigrants arrived in this country. A small fraction more than one-half, being mostly women and children, stated no occupations. The occupations of 2,120,582 immigrants are stated in reports of the Bureau of Statistics, 24 occupations being classed as professional, 133 as skilled, and 42 as miscellaneous. Of all the immigrants, 963,938 are classed simply as laborers. This is about 48 per cent. of all whose occupations are stated. These are absolutely unskilled laborers, for the men who have worked on farms or driven teams or pursued any other occupation that can be named are otherwise enumerated. The farmers and farm laborers numbered 372,389, or about 18 per cent. The servants numbered 177,450. Whether these should be classed as unskilled laborers the American housekeepers can perhaps testify. They make a little more than 8 per cent. The miners were 38,570, or less than 2 per cent. It is true that miners are in a sense skilled, but their wages are so low that they belong with the unskilled laborers and the farm laborers. These laborers with no skill at all, these house servants, these tillers of the soil, and these delvers beneath the soil make a total of 1,552,297, or 73.2 per cent. of all the immigrants whose occupations were stated.

Take now the leading handicrafts. The carpenters furnished 61,967, or nearly 3 per cent. of immigrants with occupations; the blacksmiths, 21,318; the masons, 21,580; the tailors, 22,995; the shoemakers, 22,723; the bakers, 14,677; the butchers, 13,991; and persons classed as engineers, machinists, etc., 13,668. This group of handicraftsmen furnished 192,919 immigrants, or 9.1 per cent. Eleven other handicrafts—namely, stone-cutters, plasterers, plumbers, painters, cabinet-makers, locksmiths, saddle and harness makers, shopwrights, printers, coopers, and hatters—altogether furnished 40,157; and persons classed as mechanics and artisans not otherwise described numbered 23,735. These two groups make another 3 per cent. of the immigrants with occupations. The mariners and the dressmakers and seamstresses are not closely allied; but together they make a little more than 1 per cent., the mariners numbering 14,929, and the dressmakers and seam-

stressers 8,633. The merchants and traders foot up to 64,540, the tobacconists and workers in tobacco, a mixed class of tradesmen and handicraftsmen, to 9,165, and the clerks to 27,123, the three classes amounting to 100,828, or 4.8 per cent.

The precise effect of the tariff in making our country a land of refuge for the toilers of the Old World is not very apparent in figures thus far. We must get down to smaller figures, in order to find the classes drawn to this country in this manner.

The cotton spinners, the spinners not otherwise described, the silk, wool, and other weavers, the wool-sorters, the operatives not otherwise described, the calico printers, carders of all kinds, and the flax-dressers may be lumped together as employees in textile industries. Of these, only 23,816 are enumerated in the immigration tables for ten years. This is about 1.1 per cent. of all the immigrants with stated occupations, or half that fraction of the total immigration. These being the facts, it appears that there must have been a substantial exaggeration in the statement that there were thousands upon thousands of English cotton operatives in the cotton factories of this country, though, in a certain very narrow sense, the statement is true; for, if there were in our cotton factories four thousand persons who had come from English cotton factories, the language referred to would be strictly true, though unquestionably deceptive.

The other class of occupations most directly affected by our tariff is composed of the workers in metals. If we take all the iron workers mentioned in the tables, divided up into six or eight trades, and add metal rollers and workers, brass-workers and wire-workers, nail-makers, cutlers, and file-makers, we find that workmen in all these trades to the number of 8,133 reached this country in ten years. This is not much more than one-third of one per cent. of the immigrants with occupations.

There are a few other occupations that have received especial encouragement from legislation, but this encouragement has small effect upon immigration. In the ten years under consideration, 713 potters, 206 paper-makers, 767 glass-blowers, 34 hosiers, and 1,912 tanners and curriers came to this coun-

try. If we add together the immigrants in the textiles and metal industries and these five miscellaneous industries, we have a total of only 35,581, or considerably less than 2 per cent. of all the immigrants with occupations.

The thousands upon thousands of foreigners in our cotton mills are to a great extent people who had never been in a cotton mill till they came here. They came here as persons without occupations, or as laborers, or as servants, largely as children, and in the course of their efforts to find something to do drifted into the cotton mills. The same thing is true of the woolen mills and the iron-making establishments. However much our tariff may improve the condition of working people in the protected industries, it does not improve their condition to such an extent as to tempt any very considerable number of people in Europe who have learned the trades to come to this country. If the unskilled laborers and the farm laborers and the servants and miners have intelligence enough to know about the United States, and can get money enough to come here, the more intelligent and better paid operatives in factories and mills could easily get here. There are no means at hand of ascertaining what ratio the number of emigrants from Europe of each class bears to the total number of people in such class in the country from which they emigrate; but the operatives in metals and textiles, etc., are certainly numerous enough to have furnished us with more immigrants than we received, had the temptations which we offered been as alluring to them as they were to the classes industrially below them.

Primarily, it is our land that draws immigrants. The great bulk of them are people who can dig, and who cannot do anything else beyond such supplementary labor upon the soil as is involved in farming. A country of rapidly increasing population builds a great many houses, and requires a great many new coats and shoes; and so the most numerous groups of immigrants after the farmers and diggers and personal attendants are the carpenters and smiths and masons and tailors and shoemakers. The tables afford no evidence that the tariff and any advantages secured by it for those who work upon protected commodities draw people hither from foreign lands.

The emigrant is sometimes described as the enterprising and progressive person of his hamlet; and we sometimes flatter ourselves that we are getting the pick of European workmen, because only the most energetic and ambitious would undertake the dangers of removal to another country. These figures show the contrary. They show that the great bulk of our immigration consists of the people who can find no place in their own country. This immense preponderance of the classes whose wages in Europe are the lowest, and whose lack of acquired skill makes their securing of employment most difficult, shows that we are getting the Europeans who can't get a foothold in their own country,—we are getting what is left over after all the places in Europe are filled.

FRED. PERRY POWERS.

A SUGGESTED REARRANGEMENT OF ECONOMIC STUDY.

It is not often that those scholars to whom the present state of economics seems quite unsatisfactory venture on an explicit statement of the manner in which improvement should take place; but, in the last number of the *Jahrbuch für Gesetzgebung*, Dr. Hasbach presents a scheme for reshaping instruction in economics, which is tantamount to a scheme for reshaping economic science, and which, though not aiming to be more than tentative, yet is given in such detail as to make tolerably clear the extent of the proposed departure from the beaten track. The author is professor in Greifswald, and has been a pupil of Professor Schmoller; and Schmoller himself adds a note, in which he points out wherein he agrees and wherein he does not agree with his former pupil. We have therefore something like an authoritative statement of what the adherents of the more pronounced historical school wish to effect.

Hasbach would begin instruction in economics by a study of industry and of the technical processes of industry,—a study of mining, fishery, forestry, agriculture, the manufacturing arts, and commerce. Charts, illustrations, models, inspection of manufacturing and other establishments, should form part of the teaching, which would therefore be carried on most

advantageously in towns that are near to an active and varied industrial district,—for instance, in Bonn. A previous training in natural science promotes the thoroughness of such study; and the author believes that study in the *Real-Gymnasien*, the non-classical schools, would form an excellent preparation for economics. The next step is the study of economic history,—a subject which Hasbach believes to be hardly more than explored as yet, but still affording materials for a good general presentation. Then comes the study of economic theory. Until the first two stages have been gone through, the student is not equipped for economic theory, because “the theory of economics is an analysis of the economic life of the civilized peoples of our time.” In its domain should be placed all conclusions of a theoretic kind, which the customary arrangement of economics in the hands of German writers puts into the fields of finance and economic policy. Theory is to embrace a larger number of subjects, and bring about a thorough understanding of economic life. The author illustrates his meaning on this point of the enlarged scope of economic theory by explaining that, under the subject of exchange, not only value in exchange, price, and money are to be handled, but a detailed treatment must be given to the subjects of transportation, markets, and exchanges (*Börsen*), weights and measures, money and coinage, moneyed capital and banking, the function of trade and the influence of existing law,—so exact a theoretic treatment to all these topics that “not a corner of economic life shall fail to be lit up.” Elsewhere, he mentions that the question of government management as against private industry, the economic effect of direct taxation, the operation of indirect taxes, are to be taken out of finance into theoretic economics. He believes that, with such full treatment, the insignificance of the field in which deductive treatment is possible will become obvious; and controversy as to methods will be heard less.

This would close economic study proper. Apart from it, but closely connected with it, stand certain other subjects, of which parts are now apt to be included by German writers in the strictly economic field. These are: first, administrative law; second, the investigation of practical economic and social

questions of importance at the time (such as, for our time, bimetallism, American competition, and insurance legislation); and, third, politics, or political science. In other words, the student of economics would have six subjects, or courses of lectures, to pursue; namely, processes of industry, economic history, and economic theory in one group, and administration, practical economic problems, and politics in another group.

But of these subjects, oddly enough, the first three are not to be taught by the professor of political economy. He is to teach only two in the first group,—economic history and economic theory,—while he is also to handle the practical economic problems in the second group,—a shifting of the line of division, which indicates that the attempted discrimination between economics and the related fields of administrative law and politics is not so severely logical as it assumes to be.

Professor Schmoller adds a note to Hasbach's proposal, expressing general agreement with it. He believes that study of the processes of industry is a necessary introduction to that of economics; and he says that he advises every student to attend lectures on economic history before undertaking the study of economic theory. He acts already in the line of his pupil's suggestion by not treating finance as a separate subject. He lectures instead on general financial and administrative history. On other points, he differs. He doubts the expediency of separate departments and faculties of political science, the establishment of which Hasbach advocates. Moreover, he does not believe that a study of natural science is the most useful preparation for that of economics. As the latter belongs to the mental sciences, and its fundamental questions are historical and psychological, a classical and philosophic training gives the best foundation for it.

There is nothing in this proposed rearrangement of a course of extended economic study which is inconsistent with the severest deductive or "orthodox" treatment of the subject. No one will deny the advantages of a careful description of industry and investigation of economic history, though it may be doubted whether as much time should be given to each of these as to economic theory itself. Moreover, the present writer agrees that a fairly detailed analysis of what may be

called the social organism forms the best introduction to economic study, and that treatises and text-books would be improved if their opening chapters consisted mainly of descriptive matter. Dr. Hasbach, however, goes too far in demanding a complete course of study on the processes of industry as indispensable to an understanding of economics. Interesting and useful as such a course might be in itself, much less would serve the economist's purposes. The general drift of the proposal, however, is not without support among writers who have little sympathy with the extreme historical school. Professor Newcomb begins his exposition in his *Principles* with a book entitled "Description of the Social Organism"; and, as was noted in the last issue of this *Journal*,* the unfinished treatise left by Professor Jevons contemplated a similar introductory part.

That the study of economic history should precede that of economic theory seems quite inadvisable. The value of such study—indeed, the absolute need of it as a means of training in the application of economic principles—is almost beyond dispute. But it helps the student more, if undertaken after a training in economic reasoning, or, at least, side by side with it. Here again, however, there is occasion to dissent rather as to the arrangement and sequence of study than as to the subject-matter to be taught.

Doubtless, a more serious difference of opinion would be brought out if Hasbach and Schmoller had stated more explicitly what they would include under economic theory. The hints of the former indicate that "theory" would include a great deal of matter which others would call descriptive, such as a treatment of coinage, of transportation, of weights and measures. Already, English readers of German treatises (Schönberg's *Handbuch*, for instance) are often at a loss to know where they are, whether in the domain of economic analysis or in that of economic description and practical politics; and this uncertainty would probably be felt still more in a treatise by Schmoller and his pupils. These scholars would probably drop as completely as possible not only those "pedantic accumulations of definitions, disquisitions as to what consumption is, what is production, what is capital," which

* Vol. ii. p. 65.

Schmoller repudiates with a contempt not entirely without excuse, but also all deductions from the play of human motives under assumed conditions not corresponding literally with the facts of industry. On this point alone, a real and serious disagreement exists between the deductive economists and the advocates of exclusively historical and practical treatment. Even here, we cannot be sure that the disagreement is really serious; for the historians never have stated explicitly how far they would go in flinging away deduced principles. Very likely, a treatise from them, if finally worked out, would show at bottom only a difference in emphasis, in the degree of correctness ascribed to general conclusions, in readiness to apply them at once to practical questions, and not a substantial dissent from the essential principles of classic political economy.

F. W. TAUSSIG.

CORRESPONDENCE.

ECONOMIC THOUGHT IN RUSSIA.

CHARKOV, September, 1887.

LITTLE is to be said about the state of economic literature in Russia. Our economic literature is neither old nor is there much of it. It has had a real existence only within the last thirty years. It is true that economic works were published before, but very rarely. By way of proof, some significant figures may be mentioned. Between 1806 and 1856, no more than 1,500 economic publications appeared: whereas, in the period from 1856 to 1879, the number was 4,500. That is, in the course of half a century there were but one-third as many publications as in the five-and-twenty years following, the production per year being thirty against one hundred and forty. In the earlier period of half a century, the well-known treatises of Adam Smith, Say, and Blanqui were translated into Russian. Only a single treatise of this period can be said to show originality, and to be of some importance,—Butowsky's *On the Wealth of Nations* (1849). Its importance, however, lies only in the fact that it covers the whole field of economics; and it is original only in the sense of not being a translation. The author studied the literature of foreign countries, and presented the results of his studies in Russian.

The state of Russia during this period was such that no literature could well arise. The censorship during the thirty years' reign of Nicholas smothered all thought. State and society were in a condition of stagnation, and there was no stimulus to scientific thought. Literary capacity was rare, and culture was confined to a few hundred high officials.

The year 1856, after the Crimean War, was a turning-point. The war had brought the conviction that the old system of government was untenable. Reform began. The serfs were emancipated, railroads were built, a large number of credit

institutions were created, local self-government was established in cities and provinces. Economic training was required for these measures, and a demand for the study of political economy set in. Political economy became the fashion. The newspapers of that date are full of articles on economic subjects, and a periodical, the *Economist*, was established for their special treatment. But the foundations of economic science did not exist. There were no text-books, and the supply of all kinds of economic literature was deficient. It was of course impossible to write text-books at once; and translations of German, French, and English works were resorted to. The well-known treatises of Roscher, Thünen, Garnier, Ricardo, Mill, McLeod, Carey, appeared in Russian, with more or less of editing and modification. This translated literature maintains itself to our day. Valuable publications appear in foreign countries; and so, for example, we have had recent translations of Cossa's Italian text-book and of the second volume of Marx's *Capital*. But the period of translations has passed; and the most important part is now played, not by translations, but by works written in Russian. Foreign works can teach us only economic principles. We have studied them and learned something from them; but Russian society has its own problems, imperatively demanding solution. These problems have found consideration in the Russian text-books,—the land problem, for instance, the problem of clearing off the dues of the peasantry, and others. In the earlier period there was but one treatise of this kind,—*Principles of Political Economy*, published in 1862 by Gorlov, at that time professor at the University of Petersburg. Other treatises, by Hodskey, Ivanykov, Werden, and Antonovitch, are of very recent date, between 1880 and 1887. All are more or less successful compilations, and all are much influenced by German models.

Our monographic literature deserves more attention. Some monographs are thoroughly independent investigations, and may be compared with the best of similar foreign works. But this is, of course, not the case with the majority; and the average is mediocre. The average quality is certainly below the average, for instance, of German literature. The thoroughness of the Germans is not to be found. The Russian is more super-

ficial, less serious: in this respect, he is rather like the Frenchman. But he is also like the Frenchman in another less unfavorable point. His presentation is clearer than that of the German, his style more simple and less involved. Doubtless, the character of the Russian language has its effect. Its construction is more pliable and permits greater variety than is the case with the German language, with its stiff professorial style. Our language has more resemblance to French and English. Still another peculiarity of Russian literature is this: English, French, and German writers, as a rule, are familiar only with the literature of their own country. Russian authors are more cosmopolitan. German, French, English, and in recent times not unfrequently Italian, works are regarded. Nevertheless and for all that, the average quality is not particularly high. Some monographs come from the pens of youthful writers, and, as might be expected, carry the stamp of their authorship. They are, in the main, dissertations written in order to obtain a degree, and occasionally are patchwork pure and simple.

Finally, we may note the difference between the old and the new *modus scribendi*. In former times, the would-be writer collected a few shelves full of books, read them, and wrote a monograph. A new book was done and ready in the course of a few months. If the writer was empty-headed, an eleventh book was simply added to the other ten. If he was a man of capacity, he enriched the literary supply with a new compilation, but, after all, only a new compilation from the same material. Nowadays, the task is more complicated and difficult, and more is demanded of a monograph. Quite a different procedure has become the fashion. The modern author must collect his material himself, at the place where it lies. He must often make wearisome and expensive journeys; he must search through the large libraries and archives of Berlin, Vienna, Rome, Paris, before he can produce a thorough piece of work. Time and money must be expended. If he has skill in working over his material, the result is good. If he has not such skill, the result is neither good nor bad, but something at least is gained in the shape of the new material. Another writer will not fail to appear, who will be able to make better use of it. This laborious procedure is not necessary for the treatment

of all subjects. Abstract investigations do not demand it; but economic monographs, treating abstract questions of theory, are in the minority, and appear very rarely. In recent years, but one important work of this kind has been published, Siber's *Ricardo and Marx* (1885). Most monographs treat of concrete subjects, and studies of this character prevail largely in the most recent Russian literature.

The majority of our economic works have a practical origin. They owe their existence to the immediate and urgent needs of our social conditions, which have stimulated thought, or at least are closely connected with recent investigations.

The first in order of the questions presented by our social conditions—a question which in its time attracted not a little attention, and made not a little bad blood—was that relating to the peasantry and the land. The emancipation of the serfs in 1861 brought with it the need of regulating the proprietary rights of the peasantry. But almost all peasant proprietorship was and still is ownership by the commune. The question arose whether the government should promote this system of ownership. Some were of the opinion that the commune should be split up, in order to improve agriculture. This opinion aroused great opposition on the part of the Old Russian party, which considered the peasants' commune a sacred thing. The question is a most complicated one, and cannot be answered in a word. Not until recent years has the conviction been reached that the commune must be retained, in order to insure to the peasants their ownership in the land, and this even though it is seen that such a system hampers the progress of agriculture. At present, our literature has hardly any opponents of the communal system. Thirty years ago, however, we were still much in the dark. The government was undecided. The law recognizes both kinds of ownership, communal and individual; and neither is promoted or hampered. Prince Vassilschikov, Messrs. Kavalin and Posnikov (I mention only the most prominent), have done much to clear up this question, and have done excellent service by their extensive monographs on it.*

* On the emancipation of the serfs in Russia, we have two comprehensive treatises, by Skrebitzky and Ivanykov.

The next problem was that of agricultural credit on long time. It was supposed that the landed proprietor would need money. The serfs were free; and, in future, workmen would have to be hired. Moreover, many would find it necessary to buy agricultural implements. Hitherto, they had had none, their fields having been tilled by the serfs, with tools belonging to the serfs. Besides, the character of agriculture would undergo a reform; and machines would have to be substituted for manual labor. All this was going to cost money. But at that time there existed none but government banks, whose organization was quite irrational. They made loans for periods of fifty-six years, while their means consisted of deposits payable on demand. They were able to maintain themselves only through the government and by aid from government funds. It was perceived that they were untenable, and it was determined to wind them up. Attention had to be paid to private banks, which, however, had first to be created. At that time, few persons in Russia had any conception of private banking. The first treatise on private banks appeared just at this time, a monograph by the academician Besobrasov, on mortgages, in which different European establishments making loans on long time were described. The old government banks were wound up, and about twenty new joint-stock banks and credit associations were gradually founded. Very rosy ideas of the effect of credit were then entertained by Besobrasov, as well as by others. But one side of the matter was looked at,—the advantages which credit would bring. But an experience of thirty years has now shown that there are two sides to the matter, as there are to most things of this world. Now we know that credit helps only the thorough and careful farmer, but brings ruin to him who is careless and stupid. The landed proprietors now cry out that the banks have plucked them, and made high dividends at the expense of the land-owners; that credit has obliterated the distinction between real and personal property, and taken the land out of the hands of the old nobility and put it into the hands of strangers. A consideration of this disadvantageous side of credit was undertaken by Mr. Hodsky, who published some years ago a thorough treatise on *Agricultural Credit in Russia*. This work rests

mainly on the well-known investigations, in the same field, of the German economist, Rodbertus. The nobility, which is all-powerful in Russia, has been successful within two years in securing of the government the establishment of an exclusive bank for the nobility. It is the object of this institution, which is founded by the government, and belongs to the crown, to compete with the private banks, and to assume, at a low rate of interest, the loans formerly contracted with these banks. It operates by means of mortgages. Its transactions as yet have had no considerable results.

✓ The third great task arose again in consequence of the emancipation of the serfs. The lands of the peasants, which had been in their possession from remote times, but in law had been the property of the gentry, now became private property of the peasants. In order to pay for them, the peasantry were required to pay to the government in the course of forty-nine years the assessed value of each plot. The government on its part used the money so obtained in order to pay the interest and principal of the securities which were given to the land-owners in exchange for their previous possessions. The peasantry, of course, have also to pay various other taxes. Well, it is asserted that their burdens are by no means light. Whether or not this be the case, the fact cannot be disputed that the peasant is often in need of money, that he must pay high rates of interest to get it, and consequently falls into the hands of the usurer. It was endeavored to meet this evil by founding small co-operative credit associations on the model of the Raiffeisen associations in the Rhine provinces, and of the Schulze-Delitzsch associations of Germany in general. Messrs. Luginin, Jakovlev, and Kalypanov have done much in this respect by pamphlets, model statutes, and circulars of information, which they have published at low rates.

Misfortunes never come singly, and no sooner had it become certain that there was a grave question of credit for the peasantry than another difficulty appeared. In many villages, the plots which had been received by the emancipated serfs proved to be too small to support their families. In 1877, Mr. Janson, professor at the University of Petersburg, made a minute statistical investigation of this question, and proved in figures

the insufficiency of the plots received by the peasants. The government had again to step in, and again by means of credit. Two years ago, a government Peasants' Bank was established. If a peasant wishes to buy a plot of land, this bank advances him the money for the purpose, of which principal and interest are to be repaid by an annual payment of six per cent. through twenty-four years. The same privilege exists for communes and for associations of peasants for the purpose of buying land. The bank secures its funds by selling mortgages founded on these transactions and guaranteed by itself. Closely connected with the insufficiency of the peasant's plot of land is the question of his extra earnings. If his plot did not yield enough to support his family, how is he to fight his way? Answer: by various extra earnings as factory workman, as village mechanic, as day laborer. His chief resource is agricultural labor. The peasants of Middle and Northern Russia, where the land is sterile, swarm in spring to Southern Russia, where they work as agricultural laborers on the steppes. For this purpose, and for other purposes where collective work is to be done, they form associations (*artels*). Madame Jefimenko has earned a name in literature by a number of articles in periodicals devoted to this question. Mr. Issajev, professor at the Law School of Jaroslav, has also published a monograph on *artels*, which followed an earlier work on laborers' associations in France and Germany.

Russia's fourth plague is the inconvertible paper money. This currency has existed in Russia since the last century. The Empress Catherine II. introduced it; and, since that time, it has not been possible to root it out. During the great Napoleonic wars at the beginning of this century, the total issue reached 836,000,000 roubles. Their value sank to 42 per cent., then rose to 66 per cent. At the latter rate, the government redeemed them in 1839; and a remainder of 178,000,000 roubles was made convertible into coin. But this state of things lasted only to the time of the Crimean War. In 1854, specie payments were again suspended, and have not yet been resumed. The military expenses increased portentously; and the government turned to the good old

resource, the printing-press, as it had done in the time of Napoleon. The last war with Turkey increased the total paper issues to more than a milliard. That is the present situation. The paper stands at about eighty per cent. as compared with gold. It presents a most difficult task. In order to diminish the quantity of paper money, a new loan would have to be contracted; and the interest, of course, would bring another burden on a budget which already, without this new obligation, struggles with a permanent deficit.

To this objective difficulty, a subjective one must be added. We have our inflationists, as other countries have had them; and, as ill luck would have it, the late influential editor of the *Moscow Gazette*, Katkov, was the head inflationist.† He even succeeded in finding a few favor-carrying economists, who worked over his articles and advocated his notions. Mr. Katkov, however, had such influence in Petersburg that he could drive from office any minister who refused to follow his advice. Mr. Kaufmann was the first who published a considerable treatise in Russia on inconvertible paper money. He chose as his subject the period of the suspension of specie payments in England, which he treated from the original sources,—the Parliamentary documents and proceedings,—and from which he proved the nature and effect of paper money. Subsequently, he wrote pamphlets on the resumption of specie payments in Russia. Mr. Bunge, professor at the University of Kiev, and subsequently minister of finance, has published pamphlets on the same subject.

Russia is an agricultural country. Its manufactures are little developed. Many cities have the look of the country, and the main occupation of their inhabitants is still agricultural. Good or bad crops are the important factors for the prosperity of the country. But the grain must find a market. In recent years, this market has been beset with formidable competitors. Fifty years ago, Russia and Hungary provisioned all the rest of Europe. About ten years ago, American grain began to compete with Russian grain, and with no small success. Then came the importation from Australia,

*[The reader will observe that the present letter is dated some weeks before the death of Katkov.]

and very recently that from India. This competition has caused no little trouble to the Russian grain-grower, and has even induced the government to take some measures. The minister of finance ordered Mr. Orbinsky to proceed to America, to study on the spot the agriculture and the grain trade of the United States. The result of this journey was an interesting and comprehensive book, entitled *The Grain Trade of the United States* (1880). Even before this, the Geographical Society of Petersburg had published a large encyclopedic work, consisting of a number of monographs. The society had requested experts in all the more important centres of the grain trade in Russia to write the results of their observations and to collect statistical material, and the work referred to was the result of these investigations.

Forty years ago, we had not a single railroad. At present there are about twenty-three. Again, it was the Crimean War which proved that it was almost impossible to defend the country without means of transportation. But the railroads have cost much money and a great deal of trouble. The first road was built and managed by the government, and both construction and management proved very expensive. It was then decided to intrust the building of railroads to joint-stock companies. But the condition of the money market in Russia at that time made it impossible to secure the necessary capital on this plan. The joint-stock method was almost unknown in Russia, railroads were new enterprises, and capital was timid. A French company then offered its services. It has built two lines, but has failed to carry out the great plan of providing all Russia with trunk lines. Nevertheless, the company was of service to the country; for it proved to the Russian capitalists, by an object lesson, that railroads are profitable. The Russian capitalists then became enterprising, and were by no means inclined to leave this chance for dividends to remain in the hands of the foreigners. Nevertheless, the greater part of the capital invested in our railroads is still derived from abroad, railway securities finding their chief market in Germany. The history of railway building, during the thirty years which have followed, is a history of vacillating policy by the government. It gives a significant picture of

the hand-to-mouth administration at Petersburg, with its favoritism and its bureaucratic methods. At the outset, the minister of transportation was authorized to select, at his discretion, an *entrepreneur*, who took it on himself to found a stock company. It may be imagined what abuses were connected with this order, or rather disorder, of affairs. Next, public bids were resorted to; but the minister still had the right to set aside the lowest bidder and to select another, under pretext that the latter gave better security for doing the work thoroughly. Again, a pretty system! At last, the government patched up a new plan. The individual *entrepreneur* was decided to be unnecessary, and the government itself forms the company and sells the stock. The stockholders have a general meeting under the superintendence of a government official, and elect directors. Experience shows that the railway magnates buy up the stock through straw-bidders, and get the enterprise into their hands exactly as in old times. Mr. Golovatschov has written a very interesting history of the railway troubles. Mr. Zechanovetzky, at that time professor at the University of Kiev, wrote a history of the English railroad experience, based on the Parliamentary documents. The most important work, however, is one which embraces the whole subject of railroad transportation, written by Mr. Tschugrov, professor at the University of Moscow.

At the present time, we have more than two hundred and ten large joint-stock banks, as many credit associations, and about three hundred smaller city banks. All give commercial credit on short time. Matters have not always been in this condition. As has already been said, time was, especially before the Crimean War, when agricultural credit was granted only by the government banks. The same was the case with commercial credit. At that time there existed but a single important bank of this kind at Petersburg, with a few branches in the larger provincial cities. This single institution, which now has been re-formed and has been enlarged by the addition of fifty branches, belonged to the government. In the provinces there were no more than twenty smaller city banks. Credit hardly existed in Russia, and the nature of credit was not understood. The whole literature on the sub-

ject consisted of two translations of the well-known works of Coquelin and Courcelle-Seneuil. Messrs. Bunge and Besobrasov, whose names have already been mentioned, were the first to treat the theory of credit in Russian; but the first work which treated the entire subject of credit was written again by Mr. Kaufmann. The same author published subsequently a history of the old Italian banks.

In closing, two remarks must be made, lest a false impression be given of the condition of our economic literature. In the first place, this letter has mentioned only the more important publications, and has not considered articles in periodicals. In the second place, the literature of finance, although it doubtless belongs in the field of political economy, has not been considered at all.

H.

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[Chiefly published or announced since October, 1887.]

I. GENERAL WORKS, THEORY AND ITS HISTORY.

- BRINI (G.). *Le Opere Sociali di Pietro Ellero: Saggio.* Bologna: N. Zanichelli. 16mo. pp. 431. 4 fr.
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- FERRARA (F.). *Esame Storico-critico degli Economisti e delle Dottrine Economiche del Secolo XVIII. e Prima Metà del XIX.* [Collection of Prefaces from 1st and 2d series of Biblioteca degli Economisti.] Turin: Unione Tipedit. 2 vols. [Announced.]
- KAISER (S.). *Der Güter Umlauf in seiner Bedeutung für die Volkswirtschaft und in seiner Beziehungen zur Production und Consumption. 2te (Schluss) Theil.* Frankfurt: Sauerländer. 8vo. pp. 346. 6 m. [Complete, pp. 763. 12 m.]
- LACY (G.). *Liberty and Law.* London: Swan, Sonnenschein & Co. 8vo. 12s.
- LEROY-BEAULIEU (P.). *Précis d'Economie Politique.* Paris: Lib. Ch. Delagrave. 18mo. pp. 417. 2.50 fr.
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- BUECHNER (L.). *Die Naturwissenschaft und die moderne Gesellschaft.* Deutsche Revue, Oct., Nov.
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- JOURDAN (A.). *Les Essais de Remaniement de la Science Economique.* Rev. d'Econ. Pol., Dec.

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- ASHLEY (W. J.). *The Early History of the English Woollen Industry.* Publication of Amer. Econ. Assoc. 8vo. pp. 85. 75 cts.
- CHEYNEY (E. P.). *The Anti-rent Agitation in the State of New York, 1839-1846.* Pub. of the Univ. of Penn. 8vo. pp. 64. 50 cts.
- FURBER (A.). *Volkswirtschafts-Lexikon der Schweiz.* Lfg. 9-13. Bern: Schmid, Francke & Co. 8vo. 1.60 m. per lfg.
- HEYFELDER (O.). *Transkaspien und seine Eisenbahnen.* Hannover: Helwing. 8vo. pp. 163. 8 m.
- HOLZER (F.). *Historische Darstellung der indirecten Steuern in Belgien, Dänemark, Deutschland, mit dem norddeutschen Steuervereine, England, Frankreich, etc., auf*

- Branntwein, Bier, Wein, Zucker, Tabak, Salz [and other articles]. Wien: Spielhagen & Schurich. 8vo. pp. 315. 5 m.
- KNAPP (G. F.). Die Bauern-Befreiung und der Ursprung der Landarbeiter in den älteren Theilen Preussens. Leipzig: Duncker & Humblot. 2 Theile. 8vo. pp. 359 and 479. 16 m.
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- TIKHOMIROV (L.). Russia, Political and Social. [Translated by E. Aveling.] London: Swan, Sonnenschein & Co. 2 vols. 8vo. pp. 612. 30s.
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APPENDIX.

"THE NEW-FASHIONED GOLDSMITHS."

The tract which is reprinted in the following pages appears to be the source of the generally accepted statement as to the origin of private banking in London in the seventeenth century. Anderson,* referring to it as a "scarce and most curious small pamphlet," gives some extracts from it, and thenceforward uses it as a sufficient authority. McPherson does the same, following Anderson † closely in this as in other respects. McCulloch ‡ only cites the two annalists; but McLeod § appears to have used the pamphlet itself, and it is noticed by Macaulay. || Lawson appears to have used it at second-hand. ¶

The date of the tract is stated by Anderson as "about 1676"; and this date is written in an old hand upon the title-page of the copy in the British Museum Library, used in this reprint. "This was a bold Pamphlet at this Time," Anderson adds; "but, although it was printed, it does not appear to have ever been published, there being neither Bookseller's nor Printer's Name prefixed." Anderson's suggestion of possible apprehension of consequences by the printer tallies with the fact that the imprint has been cut off from the title-page of the British Museum copy, leaving only a trace of the words "Printed in."

The authorship of the tract is unknown. Anderson suspects that it may have been written by Sir Josiah Child, but on no ground except Child's repeatedly expressed dislike of "the trade of banking." The anonymous author, however, in his explanation of the "whole employment" of the goldsmiths "in my time," plainly makes that time precede the civil war. He could hardly have been Sir Josiah Child, then, who was but twelve years old when the civil war broke out.

It should be added that, although the following reprint adheres strictly to the orthography of the original, it is not a *fac-simile*.

D.

* *Historical and Chronological Deduction of the Origin of Commerce*, ii. 77.

† *Annals of Commerce, Manufactures, Fisheries, and Navigation*, ii. 427.

‡ *Literature of Political Economy*, 157.

§ *Theory and Practice of Banking*, chap. viii.

|| *History of England*, chap. xx.

¶ *History of Banking*, 189.



The
Mystery of the New Fashioned
GOLDSMITHS
or
BANKERS.

Their
Rise, Growth, State and Decay,

Discovered in a
Merchant's Letter

To a
Country Gent.

Who desired to bind his Son Apprentice to a
Goldsmith.

[London: circa 1676.]



The Myſtery of the New Faſhioned Goldſmiths &c.

SIR.

SINCE you are pleaſed to demand my advice in the diſpoſal of your Son to the *Goldſmiths* Trade, and my opinion of the Trade itſelf; I muſt trouble you more than I was willing to ſet down what I have obſerved of the *Goldſmiths* ſince I have Traded, and the ſteps of their Riſe and Progreſs, and leave the judgment of the whole to your Self; tis but fit that a Son ſhould owe the good choice of his employment and way to his fortunes to the prudence and love of his Father.

If I could now diſcourſe you, I ought to be ſatiſfied whether you have thought to put your Son to a *Goldſmith* of the Old or New Faſhion, thoſe of that proſiſſion having of late years wholly changed their way of Trading. In my time their whole employment was to make and ſell Plate, to buy forreign Coyns and Gold and Silver imported to melt and cull them, and cauſe ſome to be coyned at the *Mint*, and with the reſt to furniſh the *Refiners*, *Plate-makers*, and *Merchants*, as they found the price of gold and ſilver to vary, and as the Merchants had occaſion for Forreign Coyns.

But about Thirty years ſince, the Civil Wars giving opportunity to Apprentices to leave their Maſters at will, and the old way having been for Merchants to truſt their Caſh in one of their Servants cuſtody, many ſuch Caſhiers left their Maſters in the lurch and went to the Army, and Merchants knew not how to confide in their Apprentices; then did ſome Merchants begin to put their Caſh into *Goldſmiths* hands to receive and pay for them, (thinking it more ſecure) and the trade of Plate being then but little worth, moſt of the Nobility and Gentry,

and others melting down their old Plate rather than buying new, and few daring to use or own Plate, the *Goldsmiths* sought to be the *Merchants* Cash-keepers to receive and pay for nothing, few observing or conjecturing their profit they had for their pains.

It

[4]

It happened about that time that the then Parliament had coyned out of Plate, and otherwise seven Millions in Half-Crowns, and no Mills being then used in the *Mint*, the Money was of a very unequal weight, sometimes two pence or three pence in an ounce difference, & the *French* and others then changing the value of the Coins often, which made silver and gold of much greater value abroad than at our *English Mint*: The *Goldsmiths* found a new Mischievous trade to send all the money trusted in their hands into their Cocklofts, where they had Scales and various Weights adapted for their purpose, and servants constantly weighed every half-crown (at least) and sorted them to melt for Two pence or three pence, or sometimes less gain by the ounce, and sometimes their advantage being greater by the accidents of the rise and fall of the exchange, those heaviest Coins were sent way in specie, several *French* men and other Merchants making it their whole and only business weekly to transport the gold and silver so culled, either melted down or in specie; and from hence the *Goldsmiths* set up another new Trade of buying the old English gold coin at a rate much above its Lawful coyned value, buying and selling it at five, seven, eight and ten pounds in the hundred more than it was coyned for, still sending it away so fast, or supplying those with it whose business was to Transport it, that by a modest computation eight parts of ten of the coyn'd Gold was suddenly consumed, and two shillings a piece was commonly given for gold, when a penny a piece was often given before to exchange gold into silver; the Seven Millions also of silver

¹[Among the causes of this disappearance of English gold, we must reckon, besides the bad condition of the silver coinage, the change in the relative value of gold and silver, which led in 1663 to a reduction in the weight of the gold coin. See Lord Liverpool, *Coins of the Realm*, 77. Leake, *Historical Account of English Money*, 342, after speaking of the ordinance of 1647 against clipped coin, says: "And tho' twenty Millions was coined within twenty-five Years, according to the Mint-Books, it was almost all transported and melted down; so that weighty Gold was as precious in the Kingdom as Diamonds."]

new Coyned, was apparently reduced to less than one Million, and the people so abused in their money, that there was little Coin passed in trade but overworn, washed, and clipt, to the great vexation and loss of the Traders.

These unlawful practices and profits of the *Goldsmiths*, made them greedy to ingross all the Cash they could, and to combine with all mens servants who continued to keep any Cash, to bring their moneys to them to be culled, and to remain with them at four pence the day interest *per centum*² without the Masters privity: And having thus got Money into their hands, they presumed upon some to come as fast as others was paid away; and upon that confidence of a running Cash (as they call it) they begun to accomodate men with moneys for Weeks and Moneths upon extraordinary gratuities, and supply all necessitous Merchants that overtraded their Stock, with present Money for their Bills of Exchange, discounting sometimes double, perhaps treble interest for the time as they found the Merchant more or less pinched.

Profit

[5]

Profit arising by this Trade, some of them who had the highest Credit, undertook to receive Gentlemens Rents as they were returned to Town, and indeed any Mans money, and to allow them some intrest for it though it lay for a month only, or less, the Owners calling for it by a hundred or fifty pounds at a time as their occasions and expenses wanted it; this new practice giving hopes to everybody to make Profit of their money until the hour they spent it, and the conveniency as they thought, to command their money when they pleased, which they could not do when lent at intrest upon personal or real Security; These hopes I say, drew a great Cash into these new *Goldsmiths* hands, and some of them stuck to their old Trade, but every of them that had friends and credit, aspired to this new Mystery to become *Bankers* or *Cashiers*, and when *Cromwell* usurped the Government, the greatest of them began to deal with him to supply his wants of Money upon great Advantages especially after they had bought those Dollers whereof he robb'd the *Spaniards* to about the value of 300000l.³

² [Fourpence per day on £100 being slightly above six per cent. per annum.]

³ [This may refer to the capture of some of the plate ships near Cadiz, September 9, 1656, by a part of the fleet commanded by Blake and Montagu. See

After the King's return he wanting money, some of these Bankers undertook to lend him not their own but other mens money, taking barefaced of Him ten pound for the hundred, and by private contracts many Bills, Orders, Tallies, and Debts of the King's, above twenty, and sometimes thirty in the hundred, to the great dishonor of the Government.

This Prodigious unlawful Gain induced all of them that could be credited with moneys at intrest to become lenders to the King to anticipate all the Revenue, to take every Grant of the *Parliament* into pawn as soon as it was given, I had almost said, before the *Act* was passed for it, and to outvie each other in buying and taking to pawn, Bills, Orders, and Tallies, in effect, all the King's revenue passed their hands, and if *Solomon* be in the right, that *the Borrower is a Slave to the Lender*, the King and Kingdom became Slaves to these *Bankers*, and the Kingdom gave no small share of their Taxes to them, paying double and treble Intrest, as if they had not been able to raise Money for the publick Service at the times it was requisite.

But the number of these *Bankers* increased so fast, and the money at Intrest come so much into their hands, that the King and His Farmers, and all Tallies of Anticipation and Orders, could not secure all the money they had to lend. Hereupon they sought out according to their several natural wits and capacities, how to dispose of money for more then

lawful

[6]

lawful Intrest, either upon Pawns or Bottom, Reason or unreasonable discounts of Intrest for Bills, or upon notorious usurious Contracts, or upon personal Securities from Heirs whose Estates are in expectancy, or by sudden advance of money to Projectors, who drawn into Projects many Responsible Men to the ruin of their Families; 4 these *Goldsmiths* however

Thurloe, V. 390, 400, 433, 434. But it seems more probable that it is a confused reference to the seizure of three Hamburg ships, "with near three hundred thousand Pound on Board in Silver, upon suspicion that it was the Property of the Dutch," noticed by Leake, 350, on the authority of Violet. This is perhaps the seizure referred to by Whitelocke, *Memorials*, 548, under date of November, 1652. Leake says that this money enabled Cromwell to dissolve the Long Parliament, and thus fixes the date.]

4[Anderson, after describing somewhat as above the methods in which the goldsmiths employed their deposits before the run upon them in 1667, says: "As there was a great Quantity of Cash in the Kingdom at that Time, this brief

getting 10l. or 15l. *per Centum*, and sometimes more, only for the present advance of the money, besides the future Intrest, These and a hundred other practices they have used and do still continue in contempt of Law and Justice, whereof they are so conscious to themselves, that most of them do once a year (at least) sue out their general Pardon to avoid the penalty of those wholesome Laws made to prevent such Frauds, Oppressions, contempt of Government, and mischiefs to the Publick as they are daily guilty of: 'Tis also suspected that their original Trade of culling the heavy Money is not deserted by some of them; also how come all clipt and wast money to pass so current at their Shops, and so little appearance in payment of all the new coyned Money since the King's return, so many 100000l. of the *Parliaments* Coin, besides *Bullion* imported having been new coyned, and how comes *Guinies* also to be bought and sold by them so much above the Coynage rate,⁵ that upon their account only, and by their means, they pass current in payments for more than they are really worth from some of their Shops; I am sure some Merchants are supplied with Gold and Silver *English* Coyn, to transport upon the advantage of the exchange, or making their present Bargains in *France* and elsewhere, for importing Prohibited Goods.

SIR.

I HAVE given you my *Remarques upon the Rise and growth of these new kind of Goldsmiths, and I take them to have been in their highest Ascendant or State about the time that our Ships were burnt at Chatham by the Dutch: ⁶ that cold Storm*

Account may, in part, serve to answer a Query often made in our own Days; viz., How were monied People able to dispose of their Superlucration-Cash before the modern public Funds existed?"]

⁵[A complete recoinage of the Commonwealth money was ordered by Charles II. in 1661, and the coinage of guineas in 1663. The guineas, ordered in the mint indenture to pass at 20s., "immediately became current at a higher rate, by general consent, without any authority from Government." Lord Liverpool, 78.]

⁶[June 12, 1667. Several passages in Pepys's *Diary* refer to the panic among the creditors of the London bankers, excited by this alarming event. Thus (June 13) "W. Hewer hath been at the banker's, and hath got 500*l.* out of Backewell's hands of his own money; but they are so called upon that they will be all broke, hundreds coming to them for money! And their answer is, 'It is payable at twenty days: when the twenty days are out, we will pay you'; and those that are not so, they make tell over their money, and make their bags false, on purpose to give cause to retell it, and so spend time. I cannot have my two hundred pieces of gold again for silver, all being bought up last night that were to be

of the Peoples fears that their money was not safe in the Bankers hands blighted them, and since being in their declension, the Famous stop upon the Exchequer almost blasted their very root;⁷ men being unwilling to trust money in their hands to lend his Majesty, so long as they hear the deplorable Cryes of the Widdow and the Fatherless, whose money they say at Feasts, they lent to the King, and cannot repay them, no not their Intrest to buy them Bread.

Now

(7)

Now admitting that all the Creditors of the *Bankers* can no more think it safe that their money should be lent to the King, since Tallies, Orders, and the Great Seal it self, are found to be no security, I cannot imagine how Bread should be got by their trade of borrowing money upon lawful Intrest to lend upon unlawful to private persons, though they can silence their consciences and forget Christianity, and neither regard their neighbors welfare, nor the good of the whole Kingdom, but

had, and sold for 24 and 25s. a-piece." And (June 17) Captain Cooke says "that the bankers, he fears, are broke as to ready-money, though Viner had 100000*l.* by him when our trouble begun: that he and the Duke of Albemarle have received into their own hands, of Viner, the former 10000*l.*, and the latter 12000*l.*, in tallies or assignments, to secure what was in his hands of their's; and many other great men of our masters have done the like; which is no good sign, when they begin to fear the main." And see June 14 and 23. But (September 25) "I have not heard of one citizen of London broke in all this war, this plague, or this fire, and this coming of the enemy among us."⁷

⁷(January 2, 1672. For a summary account of the seizure of the bankers' cash in the exchequer, then used as "the bankers' bank," and of their efforts to obtain redress, see McLeod, *History and Practice of Banking*, chap. viii., or Lawson's *History of Banking*, 196. The infamy of advising this breach of the royal faith seems to be properly divided between Shaftesbury and Clifford; but Burnet, in his *History of his own Times*, supposing Shaftesbury to have been the adviser, adds the following: "He certainly knew of it before-hand, and took all his own money out of the Bankers' hands, and warned some of his friends to do the like." The amount seized was £1,328,826.

This seizure by Charles II. was a close imitation of the seizure of bullion in the mint by Charles I., in July, 1640, of which there is an account in Rushworth, *Historical Collections*, 1216. Anderson (ii. 68) thinks that the mint was used by the merchants as a bank in 1640, as the exchequer was after the Restoration. But Rushworth says that the bullion "was brought from beyond seas to be Coyned there," and that the seizure "gave a great alarm to the Spanish merchants and others, with which they were obliged forthwith to acquaint their correspondents and Partners beyond seas." And see also Ruding, *Annals of the Coinage*, i. 392. Anderson appears to have been misled by a remark of Sir William Temple, that "the Mint had the credit of a bank." The amount seized, according to Rushworth, was £120,000. There is an account of this affair with other citations in Gardiner, *History of England*, 1603-42, ix. 130. As to an arrangement for bringing in Spanish silver at this time, see a notice by Lord Liverpool, *Coins of the Realm*, 75.]

seek by Usurious unlawful Bargains, and oppressive Exactions from the needy and men in streights, and by hook and by crook to make the most of their Cash.

I dare take it for granted that the men now of that Trade are not men of greater natural Abilities nor acquired parts, than other Tradefmen of their age and degree, nor are they better instructed than others to employ greater Stocks in an advantageous Trade, nor have they greater Stocks of their own to hazzard to remote places, from whence most profit may be hoped for; Neither have these men greater skill in Law than other Citizens, to judg of Securities to be taken for Money, nor have they more knowledg of Men to guess at the value of their Bonds; how then should they be able to make more Intrest of money than other Traders; yet the profit that may satisfy other Traders, cannot be sufficient for them to keep open their Shops: they must have a great dead stock of Cash to answer all Payments, and be always ready occasionally to advance great Summs: their Servants and Shops must be maintained for no use but Payments and Receipts, and deducting dead Stock and Charges, if they do not take nine *per Cent.* intrest for what they Lend and dispose of, they cannot make one of one, much less subsist. Besides there must be allowance for Charges to defend themselves against Informers for their usurious Contracts, and procuring frequent Pardons, and for hazard of loss of their Money lent upon usurious Intrest, every borrower having it in his power to plead their usury against them in lue of their Debts. All these things, and many more being duly considered, I suppose people will suddenly come to their wits, and begin to examine why a *Goldsmith-banker* should be better Security than another man, or fitter to be trusted for ten times more than he is worth: They give only personal Security, and many times their Notes for 500l. 1000l, or more,⁸ when they

⁸[McLeod, *Theory and Practice of Banking* (third edition), i. 210, gives several examples of the goldsmiths' notes, still preserved by Child & Co., one of the oldest banking firms in London. "These early goldsmiths' or bankers' notes were not printed, but were just written on plain pieces of paper, like the promissory notes of private persons. The following is a specimen:—

"I promise to pay unto the Rt. honble. ye Lord North and Grey, or bearer, ninety pounds at demand.

For Mr. Francis Child and myself,
JNO. ROGERS,"]

"Nov. 28, 1684.

owe before they give that Note, twenty times the value of their own Estates, and yet these free Lenders will scarce be satisfied with two or three Mens Bonds for 1000l., that are known to be worth 5000l. a man; doubtless I say, People will think at last that a

[Banker]

(8)

Banker ought to give as good Security for money he borrows as another man, especially since he runs the greatest hazards in his disposing of Money for excessive Gain or interest.⁹

I leave it then to your self to judge whether *Banking* be like to continue half your Son's Apprenticeship, and whether all the Arts that they can teach him can be worth one of the 200l. you design to give with him; I presume upon your Pardon for my plainness and tediousness; Yet I am prompted to say something more in point of Conscience, doubting whether it be Lawful to exercise any Trade in a constant avowed breach of the Laws of the Kingdom, as all *Bankers* do, these Laws being made for the good of the Society, to which the Scripture commands obedience for Conscience sake, *where they are met* [sic] *contrary to the Laws of God.*

Perhaps it is worth the inquiry upon that account, whether any man that hath exercised the Mystery of *Banking*, hath living or dying, gone off the Stage with a clear good Estate, all his Creditors being paid, fully paid. But I judge no Man. *I submit these thoughts and my Self to Your Prudent Censure, and remain,*

Sir,

Your Humble Servant

J. R.

FINIS.

⁹ [Notwithstanding the great distrust expressed by the writer, it appears that the Little London Directory of 1677 names forty-four "goldsmiths keeping running cashes," the direct predecessors of the private bankers of the present day. Mr. F. G. H. Price, in his *Handbook of London Bankers*, vi., says that the following banking businesses are immediately descended from the goldsmiths there mentioned:—

Child & Co., from Blanchard & Child, at the sign of "Ye Marygold," Fleet Street;

Martin & Co., from Duncombe & Kent, at the "Grasshopper," Lombard Street;

Hoare & Co., from James Hore, at the "Golden Bottle," in Cheapside;

Barnetts, Hoare & Co., from Humphrey Stocks, at the "Black Horse," Lombard Street;

Willis, Percival & Co., from Thomas Williams, at the "Crown," Lombard Street.]